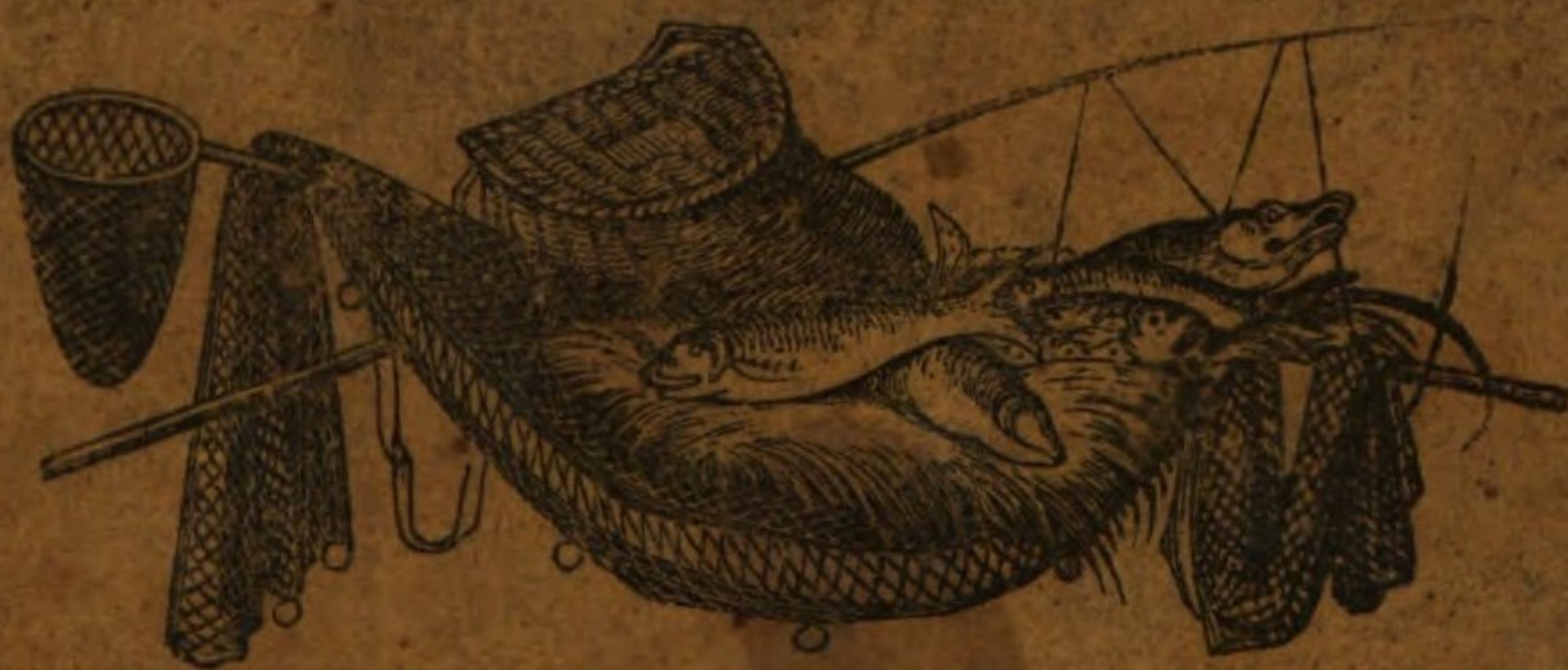


BEST'S
ART OF ANGLING,

ELEVENTH EDITION:

WITH

NOBBS'S COMPLETE TROLLER.



LONDON:

PRINTED FOR BALDWIN, CRADOCK, AND JOY.

ec. 256^m

Fest, Thom.,





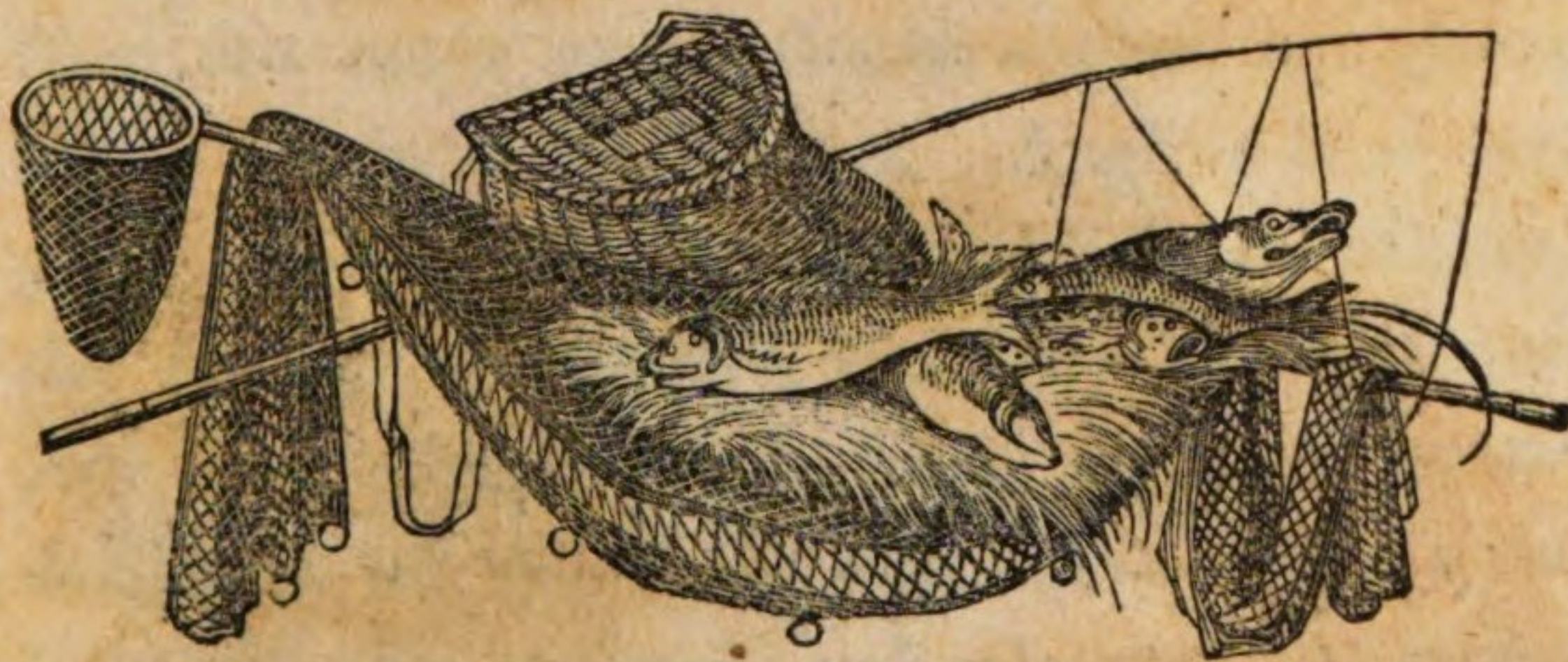
THE
ART OF ANGLING,
CONFIRMED BY ACTUAL EXPERIENCE;
WITH SEVERAL RECENT DISCOVERIES:
TO WHICH IS ADDED
NOBBS'S COMPLETE TROLLER;
ALSO
PROGNOSTICS OF THE WEATHER,
WITH AND WITHOUT THE BAROMETER.

R₂
=

BY THOMAS BEST.

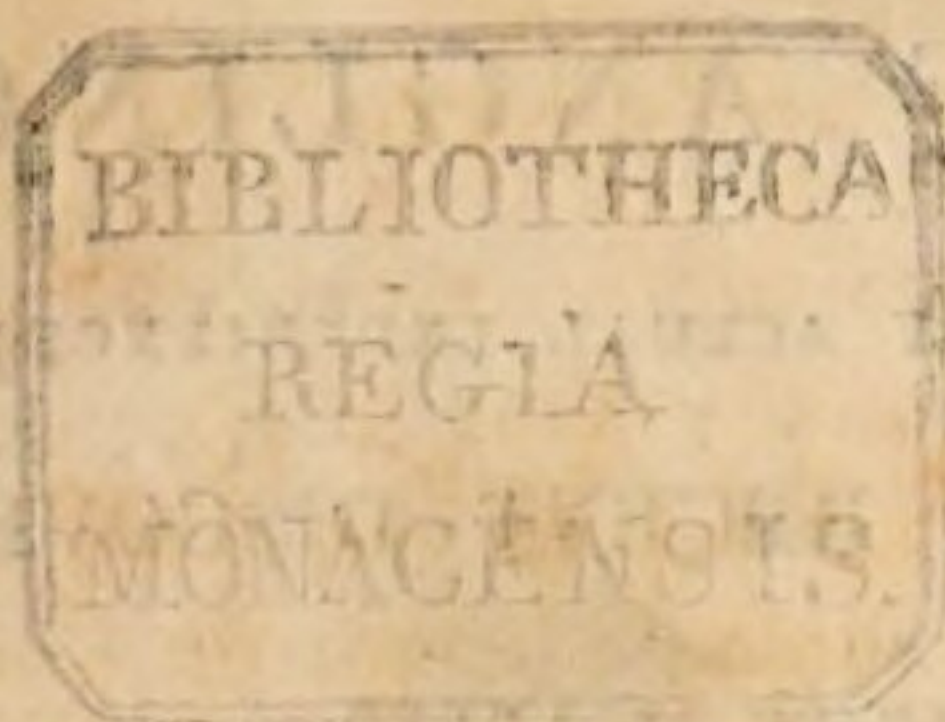
ELEVENTH EDITION,

CAREFULLY REVISED, CORRECTED, AND RE-ARRANGED.



LONDON:
PRINTED FOR BALDWIN, CRADOCK, AND JOY.

1822.



The pleasant'st Angling is, to see the fish
Cut with her golden oars the silver stream,
And greedily devour the treach'rous bait.

SHAKSPEARE.

Printed by T. C. Hansard,
Peterborough-court, Fleet-street, London.

P R E F A C E.

SINCE the first publication of this treatise, upwards of twenty-five thousand have been sold; by this encouragement I have undertaken to present the public with this *new edition*, corrected and carefully revised: and where the angler will meet with many recent observations, not to be found in any other *halieutic production*, which I make no doubt will be equally well received: I may say, without boasting, that it is universally liked, few noble or gentlemen anglers not giving it a place in their libraries. Angling is of very great antiquity, which good old Isaac Walton, the *Father of Anglers*, has fully demonstrated. Not only kings and princes, but even queens and ladies of the first rank, have taken a delight in this rational and pleasing recreation. The *Art of Angling* opens a wide field for the Naturalist, including so great a part of Natural

PREFACE.

Philosophy; so that we not only reap amusement, but instruction from it—And the more we contemplate the works of Nature, the more we shall admire the wisdom of God; and the more we reverence his wisdom, the greater will be the pleasure we shall derive from the contemplation of natural objects!

T. B.

CONTENTS.

--- PART I. ---

CHAP. I.

	page
<i>A general Description of Fishes, according to Natural History, with the best methods of Breeding, and Feeding, &c.</i>	1

CHAP. II.

<i>The best Manner of Making and Choosing Rods, Lines, Hooks, &c.</i>	9
--	---

CHAP. III.

<i>The general Baits used in Angling, where found, and how preserved.....</i>	18
---	----

CHAP. IV.

<i>Of natural Fly-fishing, with a Description of Flies generally used</i>	28
---	----

CHAP. V.

<i>A Choice collection of Rules and Hints to be observed in Angling</i>	35
---	----

CONTENTS.

CHAP. VI.

- A Description of the Fish generally angled for in England and Wales, with the proper Times and Seasons, to fish for them; their peculiar Haunts, spawning Time, and most killing Baits, &c. ...* 41

CHAP. VII.

- The most scientific method of making Fishponds, Stews, &c. to which is added several Arcana in the Art of Angling.....* 88

PART II.

CHAP. I.

- Observations concerning Artificial Fly-angling, with proper Directions for the Angler's Rods, Lines, &c.* 98

CHAP. II.

- A List of the Materials necessary for an Angler to have, and the best method to make the Palmer and May-fly.....* 103

CHAP. III.

- The Names and the best Manner of dubbing the different Artificial Flies, which are generally known, and will kill fish on any Water from the beginning of March to the end of September.....* 117

CONTENTS.

CHAP. IV.

A second List of very Killing Flies 130

CHAP. V.

Rules for Artificial-Fly-fishing 143

CHAP. VI.

Of the Principal Rivers in England, and particularly of the Thames. 147

CHAP. VII.

Prognostics of the Weather, independent of the Barometer, extracted from the best Authorities. 161

CHAP. VIII.

Rules to Judge of the Barometer 189

NOBBS'S ART OF TROLLING 197

SUPPLEMENT.

Of the Game Laws which relate to Angling... 239

SIZES OF HOOKS.

	<i>No.</i>		<i>No.</i>
BARBEL	1	Loaches	13
Bleak	13	Miller's Thumbs.....	13
Bream-Carp	3	Minnows.....	13
Bream White.....	9	Perch	4
Carp.....	3	Roach.....	11
Chub.....	2	Rud.....	9
Dace.....	12	Ruff.....	9
Eels and Eel-pouts .	4	Salmon.....	1
Flounders	5	Salmon-Fry	13
Grayling	10	Tench	3
Gudgeons	12	Trout.....	3



THE ART OF ANGLING.

CHAP. I.—*A General Description of Fishes,
according to Natural History, with the best
methods of Breeding, Feeding, &c.*

MANY persons have asserted that fish are quite deaf; but some are of a contrary opinion. It is proved, however, that water is a non-conductor of sound: why, then, should animals be provided with organs of hearing, living in a medium where sounds cannot be heard?

Fish are animals that live in the water, as their proper place of abode; their conformation being entirely adapted to this element. Their bodies are clothed and guarded with scales or shells, suitable to their respective circumstances, the dangers they are exposed to, and the motion and business they are to perform.

They have several parts peculiar to themselves; as fins, to balance and keep them upright; an air-bladder, to enable them to rise or sink to any height or depth of water, at pleasure; gills, or *bronchiæ*,

whereby they respire, as land animals do by lungs ; the tail, an instrument of progressive motion, which serves to row them forward ; eyes peculiarly formed to enable them to correspond to all the convergencies and divergencies of rays, which the variations of the watery medium, and its refractions may occasion.

In most fish, beside the great fin tail, we find two pair of fins upon the sides, two single fins on the back, and one upon the belly, or rather between the belly and the tail. The *balancing* use of these organs is proved in this manner : of the large-headed fishes, if you cut off the pectoral fins, *i. e.* the pair which lie close behind the gills, the head falls prone to the bottom : if the right pectoral fin only be cut off, the fish leans to that side ; if the ventral fin on the same side be cut away, then it loses its equilibrium entirely : if the dorsal and ventral fins be cut off, the fish reels to the right and left. When the fish dies, the fins cease to play, and the belly consequently turns upwards. The use of the same parts for *motion* is seen from the following observation upon them when put in action. The pectoral and more particularly the ventral fins, serve to raise and depress the fish : when the fish desires to have a retrograde motion, a stroke forward with the pectoral fin effectually produces it : if the fish desires to turn either way, a single blow with the tail the opposite way sends it round at once : if the tail strike both ways, the motion produced by the double lash is

progressive, and enables the fish to dart forwards with an astonishing velocity. The result is not only in some cases, the most rapid, but in all cases the most gentle, pliant, easy, animal motion, with which we are acquainted. However, when the tail is cut off, the fish loses all motion, and gives itself up wherever the water impels it.

Fishes, in a familiar sense, are distinguished into sea, or salt water fish (*pisces marini*); as the whale, herring, mackarel, &c.; river or fresh water fish (*pisces fluviales*); as the pike, trout; &c. and pond or lake fish, as the carp, tench, &c. to which may be added, those which abide indifferently in fresh or salt water, as salmon, shad, &c.

The English fishes that we have in our ponds, rivers, &c. are as follow: 1. The Carp (*Cyprinus*). 2. The Tench (*Tinca*). 3. The Bream, or *Bruma* (*Cyprinus latus*). 4. The Rudd, Oerve, or Nersling (*Orfus germanorum*). 5. The Chubb, or Chevin (*Capito seu Cephalus*). 6. The Barbel (*Barbus*). 7. The Dace, or Dare (*Leucissus*). 8. The Roach (*Rutilus, seu Rubellio*). 9. The Bleak, or Bley (*Alburnus*). 10. The Gudgeon (*Gobius fluviatilis*). 11. The Loche, or Loach (*Cobites fluviatilis barbatula*). 12. The Pink, or Minnow (*Varius, seu phoxinus lævis*). (These twelve are called leather-mouthed fishes (*Mala-costomi*); because they have no teeth in their jaws, but only deep down in their mouths). 13. The Flounder (*Passer fluviatilis*). 14. The Eel (*Anguilla*). 15. The Bull-head, or Miller's Thumb

(*Gobio fluviatilis*). 16. The Gragling, or Grayling, or Umber (*Thymallus*). 17. The Salmon (*Salmo*). 18. The Trout (*Trutta fluviatilis*). 19. The Guin-niad (*Albula salmoni similis*). 20. The Salmon Trout (*Trutta Salmonata*). 21. The Scurf, or Bull Trout (*Trutta Lacustris*). 22. The Red Charr, or Welch Torgoch (*Umbla minor Gesn*). 23. The Guilt, or Gilt Charr (*Carpio lacus Benaci*). 24. The Pike, or Pickerel (*Lucius*). 25. The Ruff (*Perca fluviatilis, minor seu aurata*). 26. The Common Prickle Back Sharpling, or Ban-sticle (*Piscis aculeatus vulgaris, seu pungitius Alberti*). 27. The Lesser Prickle Back (*Piscis Aculeatus minor*). 28. The Perch (*Perca fluvia-tilis*).

Fish, considered as food, make an important addition to the furnishing of the table; and the breeding, and feeding of them, is a peculiar art, which, for the sake of economy, every country gentleman should be acquainted with. It may not, therefore, be here unacceptable to give the reader some general rules on the subject.

The Breeding of Fishes.

The quality of the pond, water, &c. proper to this end, is scarcely determinable by any certain rule: for some very promising ponds do not prove serviceable that way. One of the best indications of a breeding pond is, when there is a good store of rushes and grazing about it, which gravelly

shoals, such as horse-ponds, usually have ; so that in a water thus adapted to breeding, a few *Milters* and *Spawners*, two or three of each, are sufficient to stock a whole country in a short time. Eels and perch are of use to keep down the stock of fish ; for they prey much upon the spawn and fry of bred fish, and will probably prevent superfluity. As for pike, tench, roach, perch, &c. they are observed to breed almost in any waters, and very numerously ; but eels never breed in standing waters that are without springs.

With respect to the growth of fish, it is observed, that carp, the first year, grow to about the size of a leaf of a willow-tree ; and at two years they are about four inches long. They grow but one inch more the third season, which is five inches. Those of four years old are about six inches ; and seven after the fifth. From that to eight years old they are found to be large, in proportion to the goodness of the pond, from eight to twelve inches.

The Feeding of Fishes.

In a *Stew* thirty or forty carp may be kept from October to March without feeding ; and by fishing with *trammels* or *flews*, in March or April you may take from your great waters to recruit your stews ; but you must not fail to feed them all the Summer, from March to October again, as constantly as cropped chickens are fed ; and it will prove profitable ; as constancy and regularity in this respect conduce much to their eating well and thriving.

Any sort of grain boiled is good to feed with, especially pease and malt coarsely ground : the grains after brewing, while sweet and fresh, are very proper ; but one bushel of malt, not brewed, will go as far as two of grains. Chippings of bread, and orts of a table, steeped in tap-droppings of strong beer, or ale, are excellent food for carp. Of these the quantity of two quarts to thirty carp is sufficient ; and so fed morning and evening, is better than once a day only.

There is a sort of food for fish, that may be called accidental, but no less improving than the best that can be provided ; and this is when the pools happen to receive the waste of commons where sheep have pasture ; the water is enriched by the soil, and will feed a much greater number of carp than it otherwise would do ; and further, the dung that falls from cattle standing in the water in hot weather, is also a very great nourishment to fish.

The best food to raise pikes to an extraordinary size or fatness, is eels : without these it is not to be done, but in a long time. Next to these, small perch are the best meat. Bream put into a pike pond, breed exceedingly, and are fit to maintain pike. The numerous fry of roach and other small fish, which come from the greater pools into the pike quarters, will likewise be good diet for them. Pike in all streams, and carp in all hungry springing waters, being fed at certain times, will come up, and take their meat almost from your hand.

The best feeding-place is towards the mouth of the

pond, at the depth of about half a yard ; for by that means the deep will be kept clean and neat ; the meat thrown into the water, without other trouble, will be picked up by the fish, and nothing be lost : yet there are several devices for giving them food, especially pease ; as a square board let down with the pease upon it.

Where fish are fed in large pools or ponds, when their numbers are great, malt boiled, or fresh grains, is the best food. Thus carp may be fed and raised like capons, and tench will feed as well, but perch are not for a *stew* in feeding time.

You should make choice of such a place for your pond, that it may be refreshed with a little rill, or with rain-water running or falling into it : by so doing fish are both more inclined to breed, and are refreshed and fed the better.

There are many circumstances that conduce much to the feeding of *pike*, *perch*, *chub*, *carp*, *roach*, *dace*, and *bream*, particularly conveniency of harbour ; for those fish that lie amongst weeds and boggy places are the fattest, though not the sweetest. In these kind of places they are secured from the assaults of their numerous enemies, and enjoy a more safe and contented repose ; rest and quietness being as natural and helpful to their feeling as to other creatures. Some waters are more nourishing than others ; a thick kind, if it is not foul or muddy, is of a better consistency, and the parts better disposed, and qualified for nutrition than those of a more thin and rarified substance. No

element that is pure, and without mixture, is well adapted for nourishment ; neither can fish live on pure water, sucking in those slender particles of their beloved element alone, without the concurrence and assistance of some grosser and terrene qualities, which are intermingled with those liquid bodies.

Having mentioned that fish are exposed to numerous enemies, I shall conclude this chapter by giving the reader a poetical enumeration of them.

“ A thousand foes the finny people chace,
Nor are they safe from their own kindred race :
The pike, fell tyrant of the liquid plain,
With rav'nous waste devours his fellow-train ;
Yet, howsoe'er with raging famine pin'd,
The tench he spares, a salutary kind.
Hence too the perch, a like voracious brood,
Forbears to make this gen'rous race his food ;
Tho' on the common drove no bound he finds,
But spreads unmeasur'd waste o'er all the kinds.
Nor less the greedy trout and gutless eel,
Incessant woes, and dire destruction deal.
The lurking water-rat in caverns preys ;
And in the weeds the wily otter slays .
The ghastly newt, in muddy streams annoys ;
And in swift floods the felly snake destroys ;
Toads, for the shoaling fry, forsake the lawn ;
And croaking frogs devour the tender spawn.
Neither the 'habitants of land nor air ;
(So sure their doom) the fishy numbers spare !
The swan, fair regent of the silver tide,
Their ranks destroys, and spreads their ruin wide.
The duck her offspring to the river leads,
And on the destin'd fry insatiate feeds ;

On fatal wings the pouncing bittern soars,
And wafts her prey from the defenceless shores,
The watchful halcyons to the reeds repair,
And from their haunts the scaly captives bear;
Sharp hems and corm'rants too their tribes oppress,
A harass'd race peculiar in distress;
Nor can the muse enumerate their foes,
Such is their fate, so various are their woes!"

CHAP. II.—*The best Manner of Making and
Choosing Rods, Lines, Hooks, &c.*

Rods.—THE best time to provide stocks for rods is in the Winter solstice, when the trees have shed their leaves, and the sap is in the roots; for after January the sap ascends again into the trunk and branches, at which time it is improper to gather stocks, or tops. As for the stocks they should be lower grown, and the tops the best rush ground shoots that can be got; not knotty, but proportionable and slender, for if otherwise they will never cast nor strike so well, and the line, by reason of their unpliableness, must be much endangered. Now when both stock and top are gathered in one season, and as strait as possible to be got, bathe them over a gentle fire, and never use them till they are well seasoned, which will be in one year and four months, but longer keeping them will make

them better. For preserving them when made into rods, both from rotting and being worm-eaten, rub them over thrice a year with sallad, or linseed oil : if they are bored pour in either of the oils, and let them soak therewith for twenty-four hours, then pour it out again, and it will preserve them from the least injury. In general the length of the rod is to be determined by the breadth of the river you angle in, but a long rod is always of more use than one too short; provided it is truly made, one of about five yards and a half long you will experimentally find to be quite sufficient. When you have taken your stocks and top from the place that you put them in for seasoning (where they must have remained sixteen months at least) ; match them together in just proportion ; and let the rod consist of five or six pieces ; if you ferrel it, observe that the pieces fit with the greatest nicety, and in such a manner as when put all together they may not wriggle in the least, but be in proportion, and strength, as if the whole rod were but one piece. If you bind them together, it must be with thread strongly waxed, having first cut the pieces with a slope, or slant, that they may join each other with the greatest exactness, and then spread a thin layer of shoemaker's wax over the slants, or a glue, which I have set down in the *arcana* for the angler's use. Afterwards you must cut about six inches off the top of the rod, and in its place whip on a smooth, round, and taper piece of whalebone, and at the top of that a strong loop of horsehair. The whole will be

then completed, and, thus made, will always ply with a true bent to the hand. Your fly rods may be made in the same manner ; but must be much more pliant than the others, and more taper from stock to top. It is of service to them to lay by some time before you use them.

Your top for the running line must be always gentle, that the fish may the more insensibly run away with the bait, and not be checked by its being too stiff.

For all fish that bite tenderly, a rod made of cane, reed, or bamboo, is the best : only be careful when you choose such a one that it will strike well, and that the medium between the ferrel and the joint that goes in, is not cut too fine ; for if it is, when you strike a good fish, it is ten to one you will lose some part of your rod, your line, and of course the fish ; a misfortune that has often happened to me, before I was acquainted with the above rule.

A general rod, is one which serves for trolling, dibbing, and the ground. For the former purpose small brass-rings must be whipped all the way up it, at about a foot distance, for the line to run through ; it may likewise be bored in the stock to hold the tops you are not using. That which you use for the troll must be strong, and have a ring on the top whipped on with a piece of quill, to prevent the line being cut when the voracious pike runs off with your bait : one of the tops must not be so stiff, which will serve for carp, tench, &c. and one

should be fine and elastic for dace and roach fishing. These kind of rods, which are called *bag-rods*, and pack up in a small compass, are to be had of all the fishing-tackle shops in London.

These rods when put together, should be sixteen feet long, which will do for pike or barbel; they should be ringed to a nicety, using a brass multiplying winch at the butt, and a strong spike, which will be found of great use; for by retiring from the river, and fixing the rod upright in the ground (by means of the spike), you will keep a tight line, your rod will play with every stroke the fish makes, and you will easily land him with your net.

Rods for roach, dace, tench, chub, bream, and carp, should not have the top so gentle as those for the fly, but pretty stiff, that the rod may exactly answer the motion of the hand. Roach and dace only nibble, and if you strike not in that very moment (especially if you fish with paste or any tender bait), you miss them because the top is too pliant.

Angling Line. To make this line you are to take care that your hair be round and clear, and free from galls, scales, or frets; for one well-chosen, even, clear round hair, of a kind of glass-colour, will prove as strong as three uneven scabby hairs; by putting them in water for a quarter of an hour, when made into lengths, you will find which of them shrink. Then twist them over again. Some, in the twisting, intermingle silk, which is er-

roneous ; yet a line of all silk may do pretty well, though I prefer hair in every mode of angling, except trolling, for which a silk line is best. The best colours for lines are sorrel, white, and grey ; the two last colours for clear waters, and the first for muddy waters : neither is the pale watery green despicable, which is made thus : Put to a pint of strong alum water, half a pound of soot, a small quantity of juice of walnut leaves, in a pipkin, boil them about half an hour, then take it off the fire, and when it is cold steep the hair in it. Or, boil a handfull of marygold flowers, with a quart of alum water, till a yellow scum arises, then take half a pound of green copperas, with as much verdigris, beat them together to a fine powder, and put them and the hair into alum water, and let them lie in it ten hours or more, then take them out and let them dry. Hair is made brown by steeping it in salt and ale ; or in gin and ink it becomes a curious water colour. The best way of forming the hair into lines, is with a new-invented engine, to be bought at any of the shops, and is to be used thus : To twist links with this engine, take as many hairs as you intend each shall consist of, and dividing them into three parts, tie each parcel to a bit of fine twine, about six inches long, doubled and put through the hooks which impend from the machine : then take a piece of lead of a conical figure two inches long, and two in diameter at the base, with a hook at the point ; tie your three parcels of hair into one knot, and to this by the hook hang the weight.

Or, take a common bottle cork, and into the sides, at equal distances, cut three grooves; and placing it so as to receive each division of hairs, begin to twist. You will then find the links twist with great evenness at the lead; and as it grows tighter shift the cork a little upwards, and when the whole is sufficiently twisted, take out the cork, and tie the links into a knot, and so proceed till you have twisted links sufficient for your line, observing to lessen the number of hairs in each link, in such proportion that the line may be taper.

Never strain your hairs before they are made into a line, if you do they will shrink when used.

Your links thus prepared, tie them together into a water-knot; then cut off the short ends, about a straw's breadth from the knot, and then whip some waxed silk about the knots, which is much better than inclosing them with wax.

Never, either at ground or fly angling, fix any hooks to a line that consists of more than three or four links at the most; but always make a small loop at the top and bottom of your line; the use of the one is to fasten it to your rod, and of the other to affix or remove your *armed hooks*. The line should always be leaded according to the rapidity or quietness of the river you angle in; therefore, as nearly as you can guess, always lead it in such a manner as to sink the bait to the bottom, and permit its motion, without any violent jogging on the ground. Carry the top of your rod even with your hand, beginning at the head of the stream, and

letting the bait run downwards, as far as the rod and line will permit, the lead dragging and rolling on the ground. No more of the line must be in the water than will permit the lead to touch the bottom; for you are to keep the line as strait as possible, yet so as not to raise the lead from the bottom. When you have a bite, you may perceive it by your hand and the point of your rod and line; then strike gently and upwards, if you cannot tell which way the fish's head lies; but if you can, the contrary way from where it does; first allowing the fish, by a little slackening the line, a small time to pouch the bait. That is called angling by hand, and is very killing for trout, grayling, &c.

Your rod, lines and hooks cannot be too fine, when you fish for roach and dace. I think the Londoners excel in this part of angling.

I shall treat of *float fishing* under the description of each fish.

As for your *fishing hooks*, they ought to be made of the best tempered steel wire, longish in the shank, and somewhat thick in the circumference, the point even, and straight; let the bending be in the shank. For setting the hook, or more scientifically speaking, *arming it*, use strong but small silk, lightly waxed with shoemaker's wax; and lay the hair on the inside of the hook, for if it be on the outside, the silk will fret and cut it asunder. There are several sizes of hooks, large ones and small ones, made according to the fish they are designed to take, which, when I come to treat of the different fish, the num-

ber of the hook proper for each will be fully expressed.*

Floats, for angling, are of various kinds: some made of *Muscovy duck* quills, which are the best for slow waters, but for strong streams, sound cork, without flaws or holes, bored through with a hot iron, into which is put a quill of fit proportion, is preferable; pare the cork to a pyramidal form, grind it smooth with pumice-stone, then colour it according to your fancy. Floats whether quill or cork must be poised with shot when on the line, to make them cock; that is, to stand perpendicular in the water, that the least nibble or bite may be apparent.

When a float is split or bruised, there is no remedy for the mischance, but getting a new one; but you may save the plug, and it will serve for another. But if the water gets in at the top of your float, a little sealing-wax will prevent it: if the plug of your float is loose, pull it out, and fasten it with one of the following cements:

Take *bee's wax* bruised small, *chalk* scraped fine, and *black rosin* powdered, of each an equal quantity; melt them in a spoon, or small tin vessel, and see that they are well mixed; or take *brick-dust* sifted very fine, and common *rosin*, pulverised; put one part of the *brick-dust* to two parts of *rosin*, and melt

* To make hooks, *vide* the *Arcana* at the end of the last part.

them as before directed; dip your plug in either of these, and put your float immediately upon it. When you join two floats together, let the plug be a little thicker in the middle than at the ends, which ends are to go into the quills; dip one end into the cement, and put one quill upon it, then do the like by the other, and you have a double float: or you make it by dipping the ends of both quills, when prepared in the cement, and fixing them together, which, when the cement is cold, will be very strong.

To dye quills red, which for still waters are better than other floats, take some *urine*, and put into it as much powder of *Brazil-wood* as will make it redden a piece of white paper; then take some clean water, into which put a handful of *salt*, and a little *argol*, and stir them till dissolved; then boil them well in a sauce-pan. When the water is cold, scrape your quills, and steep them in it for ten or twelve days, then dry-rub them with a woollen cloth.

Every angler should have two panniers.—one for pike, barbel, and chub—the other for trout, perch, roach, dace, bream and gudgeons; at all events he should be possessed of one, about fourteen inches wide. He should always take out with him, *lines* coiled up; *spare links*; two worm bags, one for *brandlings*, &c. and the other for *lob-worms*; a *plummet* to find the depth of the water, of a pyramidal form; a *gentle-box*; *floats*; and *spare caps*; *split shot*; *shoemaker's wax* in a piece of leather; *silk*; *hooks*, some whipped on, and some loose; a *clearing ring*, which is of use to disengage the hook when entangled; a

landing net, to land large fish with—the *disgorger*, which, when a fish has gorged the hook, by putting it down his throat till you touch the hook, at the same time pulling the line, will bring it away.

CHAP. III. *The general Baits used in Angling, where found, and how preserved.*

THE reader being furnished with the best rules relative to his *rods, lines, hooks, &c.* I shall give him a list of the baits in general use in angling; but must desire him to observe, that fish take all sorts of baits, most eagerly and freely, when he presents them to them in such order and manner as nature affords them, or as they themselves generally gather them.

The Lob-worm, Dew-worm, Garden-worm, Twatchel, or Treachet, found in a garden or church-yard, late in a summer's evening, with a lanthorn. When the summer proves a very dry one, they may be forced out of their holes with the liquor produced by bruising walnut-tree-leaves in water, the best of these are those which have a red head, a streak down the back, and a broad tail, from which they derive the name of squirrel tails. This is a principal worm for salmon, chub, trout, barbel, and eels.

Brandlings, Gilt-tails, and Red-worms are found in old dunghills, rotten earth, cow's dung, hog's dung; but the best are those to be met with in tanners' bark after it is thrown by.

These, especially the two first, are for *trout, grayling, salmon-smelts, gudgeon, perch, tench* and *bream*: the threelast take the *red-worm*, well-scoured, exceedingly well.

Marsh or Meadow-worms, are found in marshy ground, or the fertile banks of rivers, are bluish, require more scouring than the brandling or gilt-tail, and are taken from Candlemas until Michaelmas.

This is a choice worm in *March, April* and *September*, for *trout, salmon-smelts, gudgeon, grayling, flounder, bream, and perch*.

The Tag-tail, is found in marled lands, or meadows after a shower of rain, or early in the morning in *March* or *April*, if the weather is mild and temperate; and is a most excellent bait.

This is an excellent bait for a *trout*, if you angle with it whilst the water is discoloured by rain.

Directions for Scouring and Preserving Worms.

Get a quantity of moss, the best is that which is soft and white, and grows on heaths, but as this is scarce to be had in some parts, in lieu of it any kind that is fresh and sweet; rinse it well from the earth

that hangs about, and then wring it (not too dry); put it into an earthen pot and squeeze it down hard; then strew the worms upon it, and those that are not bruised will soon creep into the moss: those that lay at the top you must pick off; cover it close that they do not crawl away, and set it in a cool place in summer, and in winter in a warm one, which will prevent the frost from killing them. Change the moss every fourth day in summer, and once a week in winter, or at least let the old moss be taken from them, washed, squeezed pretty dry, and returned to them. If you want them to be quickly scoured, a little *bole armoniac* put to them will accomplish your desire: or you may put them in water for three or four hours, and they will soon be scoured, yet be very weak, but being put to good moss, they will speedily recover. When the knot near the middle of the *brandling* begins to swell, he is sick, and should be thrown away: never keep your worms in moss to scour them above ten days, in which time they will be perfectly fit for use.

There is another way of cleansing and preserving worms, recommended by many anglers, and is very good for every kind except the *lob-worm*. Take a piece of very coarse cloth, which has never been shrunk in the *fulling-mill*, wash it very clean, and let it dry; then soak it in the liquor where a fat piece of fresh beef has been boiled, and wring it out, but not so hard as to press out all the liquor; then lay it in a deep earthen pan, that has a large bottom, and put your worms thereon, that they may crawl

in and out and so scour themselves. When they have remained there twenty-four hours, wash out the cloth as before, but do not dry it. Then wet it again with some of the same liquor, and having placed your worms thereon, keep them in a close cellar; repeat this every other day during the heat of the summer, and you will not only preserve your worms alive for three weeks or a month, but make them very red, clear, and tough. When you take them out for angling put them into moss that has been well washed and not wrung dry; and when you come home at night put them again into the pan, by which they will recover and gather fresh strength; take care that there is no salt in the beef liquor, for if there is, your worms will purge themselves to death.

Mr. *Gay*, in his "*Rural Sports*," is particularly partial to the *gilt-tail*; as is apparent by the following lines:—

" You must not every worm promiscuous use,
Judgment will tell the proper baits to choose;
The worm that draws a long immod'rate size
The trout abhors, and the rank morsel flies;
And if too small, the naked fraud's in sight,
And fear forbids while hunger does invite.
Those baits will best reward the fisher's pains,
Whose polish'd tails a shining yellow stains:
Cleanse them from filth, to give a tempting gloss,
Cherish the sully'd reptile then with moss;
Amid the verdant bed they twine, they toil,
And from their bodies wipe their native soil."

Palmer-fly, Palmer-worm, Wool-bed, or Cankers, are found on herbs, plants and trees, where they are bred, if not a perfect caterpillar, yet, undoubtedly, a species thereof; they gain the name of wool-beds from their outward parts being woolly; these and the May-fly are the foundation of *fly angling*.

These are good baits either for *trout, chub, grayling, roach, or, dace*.

Bobs, found in sandy and mellow ground, and got by following the plough in autumn, are worms as large as two maggots, have red heads, and their bodies full of guts; put them in a tub with some of the mould that you gather them in, and keep them in a warm place. You may boil them the morning you intend angling, in milk and water for two minutes, which will make them tough: and put them in a box where gum-ivy has been rubbed.

These are choice baits, from the beginning of *November*, until after the middle of *April*, for *chub, roach, dace, salmon-smelts, trout, bream, tench, and carp*.

Cow-dung-bob, or Clap-bait, is found under cow-dung from the beginning of May to Michaelmas; it is bigger than a gentle, but very like one; and is best kept in the same earth you find it in.

It is an excellent bait for *trout*, if you angle with it on the top of the water, with a bristled hook.*

* The method of doing this you will find under the description of the *Trout*.

Flag-worms, or Dock-worms, found among flags, in old pits or ponds, in little husks among the strings or fibres of the roots; are small worms, pale, yellow, or white, as a gentle.

These are excellent baits for *graylings, tench, bream, carp, roach, and dace*.

The *Bark-worm, or Ash-grub*, is found under the bark of an oak, ash, elder, or beech, especially when felled, and they have lain some time; or in the hollow of these trees when rotten. It is to be used from Michaelmas to May or June. It is very full and white, bent round from the tail to the head; and the parts resembling a young humble-bee.

This is an excellent bait for *trout and grayling*; it is very tender, and curious to be baited with.

Cod-bait, Cad-bait, Cadis-bait, or Case-worm, are of three sorts:—1st. Found under stones that lie loose and hollow, in small brooks, shallow rivers, or very fine gravel, in case or husk, and when fit for use they are yellowish, bigger than a gentle, with a blackish head. A second sort is found in pits, ponds, ditches, in rushes, water-weeds, straw, &c. called ruff-coats, or straw-worms. The third is a green sort, found in pits, ponds, or ditches, in March, coming in before the yellow ones, which are not to be fished with till April, and in July they go out of season; the last sort is to be used in the month of August. When you take them to fish

with, carry them in woollen bags, for the air kills them.

These are excellent baits for all kinds of fish, particularly a large *Chub*.

Gentles, or Maggots, to Breed and Preserve.

Take a piece of beast's liver, scotch it with a knife, and hang it up in the shade: when you see it fly-blown sufficiently, take it down, and put it into a large pipkin or small barrel; then when you see the gentles have attained their proper size, put some oatmeal and bran to them, and in two days they will be scoured, and fit for use. Thus, gentles may be created till after Michaelmas. But if you desire to keep gentles all the year, then get a dead cat, or kite, and let it be fly-blown, and when the gentles begin to be alive and stir, then bury it and them in moist, soft earth, but as free from frost as you can, and these you may dig up at any time when you want to use them. They will last till March, and about that time turn into flies.*

Gentles are not only the most universal, but also the most alluring bait; and an angler should never go out without taking some with him. Trout have been taken with them, when they have refused all kinds of worms and artificial flies: to every kind

* If you want them to be scoured quickly, put dry white sand to them.

of fish they are an acceptable bait (*pike and salmon* excepted); but I do not doubt they would be so to them, were it possible to fix them on a hook large enough to hold the above mentioned fishes.

How to find and preserve Caterpillars, Oak-worms, Cabbage-worms, Colwart-worm or Grub, Crab-tree-worm or Jack, and Grasskoppers.

Beat the branches of an oak, crab-tree, or hawthorn, that grow over a public path or highway; or upon cabbages, coleworts, &c. Grasshoppers are found in short sun-burnt grass, the latter end of June, all July, and August. To preserve these baits, cut a round bough of fine green barked withy, about the thickness of one's arm, and taking off the bark about a foot in length, turn both ends together, into the form of a hoop, and fasten them with a needle and thread; then stop up the bottom with a bung cork, into this put your baits, and tie a colewort leaf over it, and with a red-hot iron bore the bark full of holes, and lay it in the grass every night; in this manner your *cads* may be kept till they turn to flies. To your *grasshoppers* put grass.

Pastes

Are variously compounded, according to the angler's fancy; but there should always be a little cotton, wool, fine lint, or flax, to keep the parts together, that they may not wash off the hooks. The following compositions make very good pastes:
The blood of sheeps' hearts mixed with honey and

flour, and worked to a proper consistence: old cheese grated, a little butter, sufficient to work it, and coloured with saffron. In winter, fat rusty bacon instead of butter. Crumbs of bread worked with honey, and moistened with gum-ivy water. The inside of a French roll, or crumbs of bread, worked well with clean hands with water alone. What fish each of these pastes are proper for, the reader will find under the description of each fish: therefore I shall only make the following observations concerning pastes, which may be of use to young anglers because, founded on experience. In September, and all the winter months, when you angle for chub, carp, and bream, with paste, let the bait be as large as a hazelnut; but for roach and dace, the bigness of a pea is sufficient: choose a still place, use a quill float, a small hook, and strike at the first biting of the fish.

When you wish to have your paste of a yellow colour, use a little *turmeric*; when of a flesh, or salmon colour, *vermillion* or *red-lead*.

Various other excellent Baits.

Sheeps' blood, placed on a trencher till it becomes pretty hard, then cut into small pieces proportioned to the size of the hook; put a little salt to it; it will prevent its growing black. *Wheat*, or *malt*, boiled soft in milk, and the husk taken off, is a good bait either in Winter or Summer. The ant fly, found in June, July, August, and the beginning of September, in mole-hills or ant-nests, where they breed. Take some of the earth, and the roots of the grass

which grow upon it, and put all in a glass bottle ; then gather some of the largest and blackest ant-flies, and put them into the bottle : these are a deadly bait for roach, dace, and chub : you must angle with them under water a hand's breadth from the bottom. The young brood of *wasps*, *hornets*, and *humble-bees*, are likewise very good ; also *minnows*, *loaches*, *sharplings*, and *bull-heads*. *Snails*, black and white ; the black ones' bellies slit to show the white—likewise *cherries*, *black-berries*, *cheese* kept a day or two in wet-rags, which makes it tough, or steeped in a little honey. Also *salmon-spawn*, which must be boiled till it is hard enough to stick on the hook ; and if you wish to preserve it, sprinkle a little salt over it, and get a glazed earthen pot, and put a layer of wool at the bottom of it, and then a little salmon-spawn upon that ; then wool again, and then spawn, and so proceed alternately till the pot is filled : it is a most destructive bait in the Winter and Spring, especially if angled with where salmon are known to spawn ; for there every kind of fish resort in order to devour it.

Let all the baits for the pike be alive on the morning you use them ; for stale ones, will not entice him so soon. The best baits are gudgeons, roach, small dace, and bleak. It is a common notion that the pike will not attack the perch, being fearful of the spiny fins, which the perch erects on the approach of the former. This may be true in respect to large fish ; but I know that small ones are the most tempting bait that can be laid for the pike : the other fish are best for trolling.

CHAP. IV.—*Of Natural Fly-Fishing, with a Description of Flies generally used.*

NATURAL *fly-fishing*, which comes under the heads of *Dibbing*, *Dapering*, and *Dabbing*, is a method with which the largest fish are taken, and requires much nicety and circumspection. The general rule in this way of angling is, to fish with a line about half the length of your rod ; but if there is wind stirring, with as much as it will carry out ; but you need hardly ever fish with more than the first length, as *dibbing* must be performed as near as possible to the bank that you stand on ; therefore a long rod and a short line is the best, which you will command with ease, and be able to shelter yourself from the sight of the fish, behind bushes, stumps of trees, &c. The line you *dib* with should be very strong : for when you have struck a good fish you will have a hard bout with him before you kill him, for want of a greater length of line : therefore, whenever I *dib*, I always use a ringed rod, with a winch for my line fixed on it, by which means I can always keep my line to any length, without the trouble of changing it ; and when I have hooked a good fish, can always give him as much scope as I think necessary, and kill him with great ease and certainty ; this method

I would by all means advise the angler to use, who will be thoroughly convinced of its utility at the first trial. Let the top of your rod be a stiff one. When you see a fish rise near you, guide your fly over him immediately, and he's your own, if the fly you use is strong on the water. In dibbing for *chub*, *roach*, and *dace*, move your fly very slowly when you see them make at it, or let the stream carry it down towards them; if it be in a still deep, shady hole, draw the fly sideways by them, and they will always eagerly pursue it. The roach takes flies the best a little under water. The best for the angler's use in this method of angling, are as follow:

Oak-fly, *Ash-fly*, or *Woodcock-fly*, found on the body of an oak, or ash, with his head downward in general, and near the bottom of the tree; it is a brownish fly, and is taken from the beginning of May till the end of August.

This fly is reported to breed in those little balls which grow on the boughs of large oaks, commonly called oak apples; they are provided with a hollow instrument, with which they perforate the integument of leaves, fruits, or buds, and through the hollow of it, inject their eggs into the wounds which they have made, where, in process of time, they hatch and are nourished: through this discovery, the formation of galls is accounted for.

The Stone-fly, found under hollow stones, at the side of rivers, is of a brown colour with yellow

streaks on the back and belly; has large wings, and is in season from April to July.

Green Drake, found among stones by river sides, has a yellow body, ribbed with green, is long and slender, with wings like a butterfly, his tail turns on his back, and is easily taken from May to Midsummer. Put the point of the hook into the thickest part of his body, under one of his wings, run it directly through, and out on the other side; then take another and put him on in the same manner, but with his head the contrary way; they will live so near a quarter of an hour.

The *green*, and *grey drake*, are taken both in streams and still waters, at all hours of the day, while in season; the *stone-fly* chiefly in the morning and evening.

The Grey Drake, is found in general where the green-drake is, and in shape and dimensions perfectly the same, but of a different colour, being of a paler and more livid yellow; and green and ribbed with black quite down the body; with black shining wings, diaphanous and very tender. It comes in, and is taken after the green-drake, and when made artificially, as directed in Part II, for the month of May, kills fish very well. The following curious account of it from Bowlker, cannot fail to amuse the reader:

“I happened to walk by the river-side, at that season of the year when the *May-flies* (he means

the grey sort) which are a species of *Libella*, come out of the water, where they lie in their husks for a considerable time, at the bottom or sides of the river, near the likeness of the *Nymph* of the small common *Libella*, but when it is mature, it splits open its case, and then, with great agility, up springs the new little animal, with a slender body, four blackish-veined transparent wings, with four black spots on the upper wings, and the under wings much smaller than the upper ones, with three long hairs in its tail. The husks which are left behind, float innumerable on the water. It seemed to me a species of *Ephemera*; and I imagined it was the same insect described by *Goedart* and *Swammerdam*, but a few days convinced me to the contrary; for I soon found them to be of a longer duration than theirs. The first business of this creature, after he is disengaged from the water, is flying about to find out a proper place to fix on, as trees, bushes, &c. to wait for another surprising change, which is effected in a few days. The first hint I received of this wonderful operation, was seeing the *Exuviae* hanging on a hedge: I then collected a great many, and put them into boxes, and by strictly observing them, I could tell when they were ready to put off their husks, though but so lately put on. I had the pleasure to show my friends one that I held in my hand all the while it performed this great work. It was surprising to see how easily the new back part of the fly split open, and produced the new birth; which I could not perceive partakes of any thing

from its parent, but leaves head, body, wings, legs and even its three-haired tail, behind on the case. After it has reposed itself a while, it flies with great briskness to seek its mate. In the new fly a remarkable difference is seen in their sexes, which I could not easily perceive in their first state, the male and female being then much of a size : but now the male was much the smallest, and the hairs in its tail much the longest. I was very careful to see if I could find them engendering, but all that I could discover was, that the males separated, and kept under cover of the trees, remote from the river ; hither the females resorted, and mixed with them in their flight, great numbers together, with a very brisk motion of darting and striking at one another when they met, with great vigour, just as house-flies will do in a sunny room : this they continue to do for many hours, and this seemed to be their way of coition ; which must be quick and soon performed, as they are of so short a duration. When the females were impregnated, they left the company of the males, and sought the river, and kept constantly playing up and down on the water. It was very plainly seen, that every time they darted down they ejected a cluster of eggs, which seemed a pale bluish speck, like a small drop of milk, as they descended on the water ; then, by the help of their tail they spring up again, and descend again, and thus continue until they have exhausted their stock of eggs, and spent their strength, being so weak that

they can rise no more, but fall a prey to the fish; but by much the greater number perish on the waters, which are covered with them: this is the end of the females; but the males never resort to the rivers, as I could perceive, but after they have done their office, drop down, languish and die under the trees and bushes. I observed that the females were most numerous, which was very necessary, considering the many enemies they have, during the short time of their appearance, for both birds and fish are very fond of them, and no doubt under the water they are food for small aquatic insects. What is further remarkable in this surprising creature is, that in a life of a few days it eats nothing, seems to have no apparatus for that purpose, but brings up with it out of the water, sufficient support to enable it to shed its skin, and to perform the principal end of life with great vivacity. The particular time when I observed them very numerous and sportive, was on the 26th of May, at six o'clock in the evening. It was a sight very surprising and entertaining, to see the rivers teeming with innumerable, pretty, nimble, flying insects, and almost every thing nearly covered with them. When I looked up into the air it was full of them, as high as I could discern, and being so thick, and always in motion, they made almost such an appearance as when one looks up, and sees the snow coming down: and yet this wonderful ap-

pearance in three or four days after the last of May, totally disappeared.”*

The Hawthorn-fly, found on every hawthorn bush when the leaves come forth, is used for *dibbing*, in some rivers, for trouts.

The Great Moth, found where there is a little breeze in Summer evenings, in gardens; has a large head not unlike an owl's, whitish wings, and yellowish body. The chub takes this exceedingly well.

The Black-Bee, or Humble Bee, is found in clay walls, and is an excellent bait for the chub. Some cut off his legs and upper wings.

The Cockchafer, or Brown Beetle, is an excellent bait for *dibbing*, for large trout or chub; they may be seen flying about in hot Summer evenings, or found in the day time, on the oak, maple, or ozier; they must be kept in tin-boxes, with holes in the lids, with some of the leaves of the trees they are found on.

* That there should be a tribe of flies, whose duration extends but to a day, seems at first surprising; but the wonder will increase, when we are told that some of this kind seem to be born and die in the space of a single hour.

The Black Beetle, is found under fresh horse or cow-dung ; the holes are easily observed, where they creep to deposit their eggs ; keep them in some of the earth that you dig up to find them.

CHAP. V.—*Rules and Hints to be observed in Angling.*

1st. EVERY brother angler should be possessed of a great deal of patience and resignation, and not be cast down with bad luck, or be elated with good ; for the same success cannot always attend him.

2nd. Never angle in glaring colours, for they are the easiest to be discerned by the fishes ; always turn out early in the morning, for that is the best time of the day ; keep your tackle always neat, and let your baits be in the highest perfection.

3rd. When you angle, shelter yourself as much as possible from the sight of the fish, for they are timorous and easily frightened ; and when you angle for trout, you need never make above one or two trials for him in the same place, for he

will in that time either take the bait or let it alone.*

4th. When the nights prove dark, cloudy or windy, you will the next day have but little sport in respect to catching large fish, especially trout; for in those nights they range about and devour small fish. But if the nights are bright, and the moon and stars are out, and the days following should be overcast, dark, and gloomy, you may depend on having good sport; for fishes are then as timorous as in sun-shiny days, and never stir from their holds: therefore having abstained from food all night, they are hungry and eager, and being encouraged by the darkness and gloominess of the day to range about, they then bite boldly and eagerly.

5th. If you wish to know what ground-bait fish like best, open the stomach of the first you take, and there you will find what he fed on last, and bait accordingly.

6th. If before you go out to angle, you should imagine, by the appearance of the weather, that it will prove showery, or there will be thunder, always take three or four night-lines out with you, and whilst you angle for other fish, lay them in according to your judgment, baited with well-scoured lob-worms, and you may depend on catching large eels, trout, &c.

* This observation holds good for pike or perch.

7th. The best way to bait your hook, for this kind of fishing, or for *worm-fishing* in general, either with *lob-worms*, *brandlings*, &c. is thus : if you bait with one worm, put your hook into him, somewhat above the middle, and out again a little below the middle ; having so done draw your worm above the arming of your hook : but note, you must enter the hook at the tail of the worm, and not at the head. Then having drawn him above the arming of your hook before-mentioned, put the point of your hook again into the very head of the worm, till it comes near the place where the point of the hook first came out, and then draw back that part of the worm that was above the shank or arming of the hook. If you fish with two worms, then put the second on before you turn back the hook on the first worm.

8th. If when you are angling in any particular spot, and have had good sport, the fish should suddenly leave off biting, you may conclude that some of the fish of prey are come to the part you are fishing in. In that case put a *minnow* on your hook alive, sticking it through his upper lip, or back fin ; let your tackle be strong in case the pike should be there, but for a certainty you may depend that either he or the perch will take it. But the best way is to have a *trimmer* or two with you, which may be applied with great advantage, whilst you angle for other fish.

9th. When you have struck a good fish, keep your rod bent, which will prevent him from running

to the end of the line, whereby he might break his hold.

10th. In ponds angle near the fords where cattle go to drink; and in rivers angle for bream in the deepest and quietest parts; for eels, under trees hanging over banks; for chub, in deep shaded holes; for perch, in scours; for roach in Winter, in the deeps; at all other times where you angle for perch; and for trout, in quick streams.

11th. It is good angling in whirlpools, under bridges, and at the falls of mills, and in any place where the water is deep and clear, and not disturbed with wind or weather; also at the opening of sluices, and mill-dams; and if you go with the course of the water, you will hardly miss catching fish, that swim upon the stream to seek what food the water brings down with it.

12th. When you fish for roach, dace, &c. in a stream, cast your ground-bait above your hook, and always remember to plumb your ground.

13th. Never trust to the strength of your rod or line when you have hooked a good fish, but always use your landing net.

14th. Your rod must neither be kept too dry nor too moist, for the one will make it brittle, the other rotten, and in sultry weather always wet the joints of your rod, which will make them adhere; and if by being wet they should stick so that you cannot easily get them asunder, never use force, for then you will strain your rod; but turn the ferrel of the joint that

is fast, a few times over the flame of a candle, and it will separate.

15th. The best times for angling are from April till October, and the best time of the day from three till nine in the morning, and three in the evening till sun-set. The south wind is the best to angle in; the next best point to that is the west; the cooler these blow in the hottest months, is the best time to fish.

16th. Never angle in an easterly wind, for your labour will be in vain; but you may if the wind blows from any other point, provided not too sharply. Fish will never bite before a shower of rain; this hint may save you many a wet skin.

17th. In the morning, if there happens to be a hoar frost, either in the Spring or advancing of the season, fish will not bite that day, except in the evening: and after they have spawned, very ill, till with grass and weeds they have scoured themselves, and by that means recovered their appetite.

18th. The best time for the *trout* to be taken, and other fish with the ground-line, is morning and evening, in clear weather and water; but if the day proves cloudy, or the water muddy, you may angle all day long.

19th. The angler may depend on catching store of fish, in a dark, close, gloomy, or lowering day, if the wind be southerly, and when, as the Poet observes,

“ The stealing show’r is scarce to patter heard
By such as wander thro’ the forest walks,
Beneath th’ umbrageous multitude of leaves.”

20th. Lastly when seated under a shady tree,

on the side of a pleasant river, or moving about on the banks of it, or otherwise pursuing your recreation ; when the gliding of waters, the singing of birds, the bleating of flocks, the lowing of cattle, the view of delightful prospects, and the various occupations of rural industry, shall dispose you to thought and reflection ; let the beauties of nature, the power, wisdom, and goodness of the *Almighty*, as manifested in the production of His creatures ; the order and course of His Providence in their preservation, the rewards of a good life, and the certainty of your end, be the subjects of *your most serious meditation !*

Having given the reader every necessary instruction, in regard to the *breeding*, and *feeding* of fishes ; with the best advice concerning his *rods*, *lines*, *floats*, *hooks*, *baits*, &c. and a set of very choice rules, hints, and cautions, I shall now tell him the best methods of taking the sorts of fish in general angled for in *England* and *Wales*.

CHAP. VI.—*A Description of the Fish generally angled for in England and Wales, with the proper Times and Seasons to fish for them ; their peculiar Haunts, spawning Time, and most killing baits, &c.*

THE SALMON (*SALMO*)

ACCORDING to the opinion of some, breeds in the sea ; but that of others seems better warranted, that he breeds in the clear, sandy, parts of rivers, not far from their mouths. It is a northern fish, being found both at *Greenland* and *Kamschatka*, but never so far south as the *Mediterranean*.

The *salmon-trout*, like the salmon, migrates up several of our rivers, spawns and returns to the sea. The flesh, when boiled is red, and tastes like the salmon.

The *white-trout*, also migrates out of the sea into the river *Esk* in *Cumberland* from July to September.

Salmon commonly spawns in *October*, and the young become *samlets* * the following year, and in a

* The *samlet* is considered by Mr. Pennant, as a distinct species, and not as the fry of the salmon, as some

few months large salmon. The *milter* and *spawner*, having performed their office, betake themselves to the sea; and we are told that when they have been obstructed in their passage, they have grown so impatient, that, clapping their tails to their mouths, with a sudden spring, they have leaped clear over weirs and other obstacles that stood in their way; and some, by leaping short, have by that means been taken.* If they happen to meet with such impediments that they cannot get to sea, they become sick, lean, and pine away, and die in two years. The principal occasion of their dying is this: the salmon being a fish by nature tender, and very chill, cannot in the winter season endure the extreme frigidity of the fresh river water, by reason of its tenuity, especially being so lately weakened by spawning; and, therefore, by instinct, they make the sea their Winter habitation, the sea being naturally warm. But if they spawn in the mean time, from thence proceeds a small salmon, called a *skegger*, which never grows large. The female salmon is distinguished from the male because its nose is longer, and more hooked, its scales not so bright, and its body speckled over with dark brown

have supposed; it seldom exceeds six or seven inches in length.

* “Salmon will sometimes ascend up a river four or five hundred miles, only to cast their spawn, and secure it in banks of sand till the young be hatched, and exuded, and then return to the sea again.”

RAY.

spots ; its belly flatter, and its flesh not so red ; more dry, and less delicious to the taste.

The growth of this fish is so extraordinary, that a young salmon being taken at *Warrington*, and which weighed seven pounds on the 7th of February, being marked with scissars on the back fin, was again taken on the 17th of March following, and was then found to weigh seventeen pounds and a half.

The principal rivers in *England* for salmon, are, the *Thames*, whose salmon surpass all others in flavour ; the *Severn* and the *Trent* ; the *Lon* at *Lancaster*, about *Cockersand Abbey* ; at *Workington* in *Cumberland* ; *Bywell* in *Northumberland* ; *Durham*, and *Newcastle-on-Tyne* ; the *Dee* in *Cheshire* ; and the rivers *Usk* and *Wye* in *Monmouthshire*. Besides the *Salmon-Leap* in *Pembrokeshire*, there is another in the river *Ban* in *Ireland* : this river is in the mountains of *Mourn* in the county of *Down*, and it passes through *Lough-Eaugh*, or *Lough-Sidney*, a large lake in the county of *Coleraine*. Mr. *Camden* says, it breeds salmon in abundance, above all other rivers in *Europe*, because it is thought to exceed all others for clearness, in which sort of water salmon delight. He bites best about three in the afternoon, in *May*, *June*, *July*, and *August*, if the water be clear and a little breeze of wind stirring : especially if the wind and stream are contrary. You must fish for him like a trout, with a worm, fly, or minnow ; or a lob-worm is an excellent bait for him, well-scoured in moss to make

it tough, clean, and lively. When you have struck him, he will plunge and bounce in the water very much : therefore it is necessary to have a strong rod, ringed as a *trolling-rod*, and a winch, with a strong line on it forty yards long, with which length, and by properly, playing him, you may kill the largest-sized one. He has not a constant residence like trout, but removes often ; and you should always angle for him as near the spring-head as possible, in the deepest and broadest parts of the river, *near the ground*. Put two large *lob-worms* on at a time, and you may fish without a float, that is with a running line. Let one yard next to your hook be *gimp*, and your hook a proper sized *salmon-hook*, No. 1.

N. B. When I come to treat of *fly-fishing*, the proper flies for salmon, &c. will be clearly expressed.

THE TROUT (*TRUTTA*)

Is a delicious fresh-water fish, speckled with red and yellow ; coming in and going out of season with the buck, and spawning in the cold months of *October* and *November* ; whereas all other fishes spawn in the hot Summer months. There are several species of this fish, all valued very much ; but the best are the red and yellow ; and of these the female, distinguished by a less head and deeper body, is preferred : by the largeness of their backs you may know when they are in season, which may serve as a rule for all other fish. During the Winter

they are sick, lean, and unwholesome, and frequently lousy. As the Spring advances, deserting the still deep waters, they repair to the gravelly ground, against which they continue to rub, till they have got rid of their lice, which are a kind of worm, with large heads: from that time they delight to be in sharp streams, and such as are very swift; where they wait for *minnows*, *may-flies*, &c. The latter part of May they are in the highest perfection.

The colours of the trout, and its spots, vary greatly in the different waters, and in different seasons; yet all may be reduced to one species. In Llyndivi, a lake in South Wales, are trout called *coch-y-dail*, marked with red and black spots, as big as a sixpence; others unspotted, and of a reddish hue, that sometimes weigh near ten pounds, but are ill-flavoured.

In Lough-Neagh, in Ireland, are trout called there *buddaghs*, which sometimes weigh thirty pounds.

Trout (probably of the same species) are also taken in Ulles-water, a lake in Cumberland, of a much superior size to those of Lough-Neagh: these are supposed to be the same with the trout of the lake of Geneva. He is usually caught with a worm, minnow, or fly, either natural or artificial; the different baits for him are the *earth-worm*, *dung-worm*, and the *maggot* or *gentle*, but the best are the *lob-worm*, and *brandling*. His *haunts* are in *purling brooks*, running very swift over chalk stones, gravel, &c. he is oftener taken in the side of the stream, than in it, though the large ones are fre-

quently caught in the deepest part of it. He delights to shelter himself behind large stones, or small banks that hang over the river where the stream running against them, creates a foam; also in the eddies between two streams; his hold is usually under the roots of trees, and in hollow banks in the deepest parts of rivers. When you angle for him at the ground, let the link of your line next the hook, be the best *silk-worm gut* you can provide; and have a nice elastic rod, which will enable you to strike true, and to feel him when he bites. Angle for him with a running line, and begin at the upper part of the stream, carrying your line with an upright hand, and feeling your lead run on the ground about ten inches from the hook, leading your line according to the swiftness of the stream; as before directed. If you bait either with one or two worms, follow the manner of baiting with them which I have laid down in the rules, and you will run on the ground without being entangled.

There is likewise a very killing method for a large trout. Make a pair of wings of the feather of a land-rail, and point your hook with one or more cadises; your hook should be bristled, that is, when you whip on your hook, fasten a hog's bristle under the silk, with the end standing out about a straw's breadth at the head of the hook, from under the silk, and pointing towards the line, by which means the head of the cadis will be kept close to the wings; angle with a rod about five yards long, and a line about three; cast the wings and cadis up the stream, which will drive it down under the water towards the

lower part of the hole ; then draw it up the stream very gently, though irregularly, at the same time shaking your rod, and in a few casts you will be sure to hook him, if there is one in the hole. You may angle the same way with two brandlings. If you use two cadises with the wings, run your hook in at the head and out at the neck of the first, and quite through the other from the head to tail.

The *minnow* is the most excellent of all baits for the trout : when you fish with them, choose such a one as is whitest, and middled-sized ; and place it on your hook in such a manner, that, being drawn against the stream, it may turn round. The best way of baiting with a minnow is thus : put your hook in at the mouth, and out at the gill, drawing it through about three inches : then put the hook again into the mouth, and let the point and beard come out at the tail ; then tie the hook and the tail with a fine white thread, and let the body of the minnow be almost strait on the hook ; then try if it turns well, which it cannot do too fast. Angle with the point on your rod down the stream, drawing the minnow up the stream by little and little, near the top of the water. When the trout sees the bait, he will come most fiercely at it, but be careful not to snatch it away, which at first you may be apt to do ; and never strike till he has turned with the bait.

N. B. In this way of angling a ringed rod is to be always used, with a winch for your line, which should have two or three swivels on it ; by which means the minnow will spin the better.

Trout are most voracious fish, and afford the angler excellent diversion.

These fish shift their quarters to spawn, and like the salmon, make up towards the heads of rivers to deposit their roe.

The rivers most famous for trout are the *Kennet* near *Hungerford* in *Berkshire*; the *Stower* in *Kent*, which runs through *Canterbury*, and is said to breed the best trout in the south-east of *England*. Those in the *Wandle*, near *Carshalton* in *Surry*; the *Amerly*, in *Sussex*; the *Dove*, *Wey*, *Lathkin*, and *Bradford*, in *Derbyshire*; *Ribble* and *Irk*, in *Lancashire*; and in the *Usk* and *Wye*, in *Monmouthshire*, are accounted excellent trouts. But, no one can absolutely determine in what particular river or brook are the most and the best. This, however, is certain, that trout are better or worse, larger or smaller, according to the nature of the soil on which the river runs: pure, clear, transparent streams, running on rocks, pebbles, or more especially *lime-stone* or *flint*, are experimentally found to breed, and afford, the most delicate and best trout.

The hook No. 2 or 3.

THE GRAYLING, GRAGLING, OR UMBER (*THYMALLUS*).

THIS fish has three different names, according to the different parts of *England* where it is found: it is by no means a general fish, and what anglers seldom meet with, except in the rivers *Dove* and

Trent, and some other small streams, particularly in that which runs by Salisbury. The *haunts* of the grayling are nearly the same as of the trout ; and in fishing for either of them you may catch both. They spawn the beginning of *April*, when they lie mostly in sharp streams ; in December they are in their prime, at which time the gills and head are blackish, and the belly dark grey, studded with black spots. They bite very freely, but are often lost when struck, the mouth being very tender. The largest that has been heard of, was taken near Ludlow : it was half a yard long, and weighed four pounds six ounces. Angle about mid-water, for they are much more apt to rise than descend ; and when you angle for them alone, and not for the trout also, use a quill-float, with the bait about six or seven inches from the ground. They take *brandlings*, *gilt-tails*, *meadow-worms*, *gentles*, &c. but the most excellent bait, in March or April is the *tag-tail*.

The hook No. 10.

THE CARP (*CYPRINUS*)

Is allowed to be the *queen* of fresh-water fish (as the salmon is the *king*), and lives longer than any other fish, except the eel, out of its element. They breed several times in one year ; but their first spawning-time is in *May*. Mr. Ray assures us that in Holland they have a speedy way of fattening them, by hanging them up in a net in a cellar, and

feeding them with bread and milk. Patience is highly necessary for every one to be endowed with who angles for carp, on account of their sagacity and cunning ; the *haunts* are in the deepest parts of ponds and rivers, and in the latter where the streams run slowly. When the weather in April, May, June, July, and August, is hot and fine, you cannot be too early or late at the sport. They seldom refuse the *red-worm* in April, the *cadis* in May, or the *grasshopper* in June, July, and August. You must angle with a strong rod and line, a quill-float, and strong *gut* at bottom : being a *leather-mouthed* fish they seldom break their hold, if your tackle is strong and you play properly. But whenever you intend to fish for carp particularly, and in good earnest, over-night lay in a ground-bait of garbage ; such as chicken's guts, blood mixed with cow-dung, or any coarse paste ; also ale-grains and blood incorporated with clay, and at the same time that you throw any of these ground-baits in, plumb the ground to two depths (for it is best to angle for carp with two rods), one about mid-water, the other four or five inches from the ground. The next morning lay your lines in very cautiously, and success will attend you. *Gentles* are very good bait for the carp, also a paste made of *honey* and *bread*, and one made with bread and water alone, tinctured with red-lead ; but nothing exceeds, in my opinion, a *green pea*, par-boiled ; having killed more with that than any other bait.

The *carp* is one of the naturalized fish in England, having been introduced here by Leonard Maschal, about the year 1514. Some of the good things which this island wanted before that period, are enumerated thus :

“Turkies, carp, hops, pickerel, and beer,
Came into England all in one year.”

Polish Prussia is the chief seat of the carp, abounding in the rivers and lakes of that country, particularly in the Frisch and Curisch-haff, where they are taken of a vast size : they live to a great age.

A carp weighing fifteen pounds seven ounces, was some time back taken out of the water in Lord Exeter's grounds at Burghley.

In fine sun-shiny days, carp will often prime about noon, and swim about the edges of a pond, to catch such flies as fall upon the surface of the water ; let the angler then take a strong rod, and pliable at the top, a strong line, and a hook large enough for a *lob-worm* ; then finding a place free from weeds, about the compass of the crown of a hat, let him drop his bait without a float, and with only one large shot upon the line, which he must lodge upon the leaf of some adjoining weed, so that the bait may not be above eight inches in the water ; then retiring, but so as to keep his eye upon the shot, let him wait till he sees it taken away, with about a foot of the line, and then strike : when he has hooked his fish, let him keep him tight, and not suffer him to entangle himself among the weeds :

but either draw him out by main force, or pull him into a clear place and there kill him.

By the foregoing method great numbers of carp may be taken in ponds which are well-stocked.

The hook No. 3 or 4.

THE BREAM (*CYPRINUS LATUS AUT BRUMA*)

SPAWNS in *June* ; his chief residence is in ponds ; is a bony fish, and very slow in growth. From *Saint James's-tide* to *Bartholomew-tide* is the best season to angle for him, and the best time of the day is, from sun-rise, to eight o'clock, in a gentle stream, the water being rather thick, and curled with a good breeze. Some say, that bream and roach will mix their eggs and milt together, therefore the angler in many places will meet with a bastard breed of bream, that never come to be either good or large, but very numerous. There is more time thrown away in angling for this fish than he is worth, being in my opinion very insipid. He delights in the deepest and widest parts of the water, and if the bottom is clear and sandy, the better ; his baits are *gentles*, *red-worms*, *gilt-tails*, and *grasshoppers*. When he takes your bait, he makes for the opposite shore ; therefore give him play ; for though he is a strong-made fish, he will not struggle much, but in two or three turns, fall on one side, and you may land him very easily. Angle for him with a strong line, with *gut* at bottom, the hook No. 4, and throw into the place you intend to

angle for him, a ground-bait made of malt, grains bran, blood, and clay, the night before ; and you may fish with two or three lines, plumbed to different depths, and follow the method which is laid down for the carp.

The French esteem this fish highly, and have this proverb concerning him ; “ *That he who has
“ bream in his pond, is able to bid his friend
“ welcome.*” The best part of a bream is the belly and head.

THE PIKE (*LUCIUS*)

Is a very long-lived fish, according to Lord Bacon and Gesner ; who say he outlives all others. He is called, the “ *tyrant of the waters,*” and will seize upon almost any thing, nay unnaturally devour his own kind. These fish were introduced into England in the reign of Henry VIII. in 1537. They were so rare, that a pike was sold for double the price of a house-lamb, in February, and a pickerel for more than a fat capon. He spawns in February or March. The best are those that are found in rivers, the larger he is, the coarser the food, and so *vice versa*. He feeds on small fish, and frogs, and on a weed called pickerel, from which some assert he derives his being : he is a solitary, melancholy, and bold fish, always being by himself, and never swimming in shoals, or in company with other fish. There are two ways of angling for the pike, by the *ledger-bait* and the *walking-bait*. The *ledger-bait* is that fixed in one certain place, and

which the angler may leave, to angle for other fish : of this kind the best is some living bait, as dace, gudgeon, roach, or a live frog. To apply it, if a fish, stick the hook through his upper lip, or back fin, then, fastening it to a strong line ten or twelve yards long, tie the other end to some stake in the ground, or stump of a tree, near the pike's haunt ; letting the line pass over the fork of a stick, placed for the purpose, and suspending the hook, by a yard of the line in the water ; but so that when the pike bites, the fork may give way, and let him have line enough to go to his hold, and pouch the bait. If you bait with a frog, put the arming wire in at his mouth, and out at his gill ; then tie the frogs leg above the upper joint to the armed wire. Secondly, The *walking-bait* is that which the fisher attends to himself, and is called trolling. Before I proceed any further in this mode of angling for the pike, I shall describe the kind of rod, line, and hooks, necessary to be used. Your rod must be a strong one, and ringed for the line to pass through, and about three yards and a half long ; your line about thirty yards long, wound upon a winch, to be placed on the butt end of your rod, and with which you may always keep your line to any length ; and at the end of your line next the hook let there be a swivel. The hooks most generally used are the two following : the first is no more than two single hooks (though you may buy them made of one piece of wire) tied back to back, with a strong piece of gimp between the shanks. In whipping the gimp

and hooks together, make a small loop, and take into it two links of chain, about an eighth of an inch diameter ; and in the lower link (by means of a staple of wire), fastened by the greater end, a bit of lead, of a conical figure, and angular at the point. The second hook may be either single, or double, with a long shank, and leaded two inches up the wire, with a piece of lead about a quarter of an inch square : at the greater or lower end fix to the shank an armed wire about four inches long, and at the top of the wire, about half a yard of gimp, with a loop at the top of that. To bait this hook, you must have a brass-needle, about seven inches long ; put the loop of the gimp on the eye, or small curve of the needle, then thrust it into the mouth of the fish, and bring it out at his tail, drawing the gimp and wire along with it, till the lead is fixed in the belly of the bait-fish, and the hook, or hooks, are come to his mouth ; then turn the points of the hooks towards his eyes, if a double hook, but if a single one, directly in a line with his belly, and tie his tail to the arming-wire, very neatly, with white thread. To bait the former, put the lead into the mouth of the bait-fish, and sow it up ; the fish will live some time ; and though the weight of the lead will keep his head downwards, he will swim with nearly the same ease as if at liberty. Either of the former hooks being baited and fastened to the swivel, cast it into the water, and keep it in constant motion ; sometimes letting it sink, and at others raising it gradually, chiefly throwing it into

the parts of the pond, mere, or river, where his haunts are most usual ; as near banks, under stumps of trees, by the side of bull-rushes, water-docks, weeds, or bushes, but in any of these places you need never make above a trial or two for him, for if he is there he will instantly seize the bait. When you draw your bait near the bank, play it longer there, first deep, then raise it higher and higher by degrees, till you bring it so near the top, that you can see it glitter ; take it not hastily out, because he often takes it near the top. When he has taken it give him line, and let him run to his hold and pouch it ; allow him in general five minutes law, then strike him, and divert yourself with him as you please. But if after he has run on with the bait to his hold, and rests there but about a minute, and then runs quickly off with it again, do not strike him until he has rested a second time ; and not then, until the five minutes are expired, unless he runs off again before they are ; which if he does, draw a tight line and strike him immediately ; if he resists very much give him line enough, which will soon exhaust his strength. When you pull him toward you, do not do it violently ; or he will launch and plunge in such a manner, that though he may not be able to break your tackle, yet he will tear away his hold, nay, even his entrails—if he is hooked there ; but if you feel him come easily towards you, wind up your line, until you see him ; then if he struggles again very much, give him line again ; so proceed till you have killed him.

The pike bites best from the middle of Summer, to the end of Autumn, about three in the afternoon, in clear water, ruffled with a gentle gale ; but in Winter all day long ; and in the Spring he bites early in the morning, and late in the evening. The best baits for him are small *roach*, *dace*, *bleak*, &c. if the day be dark or cloudy ; but a *gudgeon* is the best, if the water is clear, and the day bright and fine. Your live baits should be kept in a tin-kettle, with holes made in the lid, that you may change the water often, which will keep them alive a long while ; your dead ones in a tin-box made for that purpose, with bran, which dries up the moisture that hangs about them, and contributes to preserve them longer. Angling for the pike at the *snap* is to let him run a little and then to strike him the contrary way from whence he runs, with two strong jerks ; in this method you must use a double spring hook which is to be had at any of the shops, and your tackle must be very strong. The *snap* is best used in March, when they are spawning ; at which time they are sick, and lose their stomach ; though they will then take your bait, but immediately throw it out of their mouths ; therefore striking them when they first take the bait is the only way to be even with them ; which is called *angling at snap*. The way to bait the snap hook is thus : make a hole with a sharp pen-knife in the side of the bait-fish ; then put the gimp that is fastened to your hook into it, and draw it out at the mouth, till the spring hook comes to the place

where the incision was made; when there, put it into the belly of the fish, then have a piece of lead, about the size of a horse-bean, though of an oval form, with a hole through it from end to end, large enough for the gimp to go through; draw it down to the fish's mouth, then put it in it and sew it up. Or you may make an incision in the skin only, and draw the gimp out at the bone behind the gills: then enter it again under the gills, and bring it out at the mouth, which I think is the best method, because the hook has only the skin to hinder its fixing in the pike; whereas in the first method it must pierce through the flesh and skin before it can touch him; and if it is not very large, may hook him so slightly as to spoil all your sport. There used to be a way also of taking pike, called *huxing*, but as the use of *trimmers* is now so generally known, it would be needless for me to insist farther upon it.

I shall now communicate to the reader a method by which I have taken more pikes and jacks than any other way. The hook which you must use, is to be like the first hook that I have mentioned, with this exception only, that the lead of a conical figure must be taken away: then, before you fix the swivel on the bottom of the line, put on a cork float that will swim a gudgeon, then put on your swivel, and fix your hook and gimp to it: put a swan shot on your gimp, to make your float cock a little, and of such a weight, that when the hook is baited with the gudgeon, it may do so properly. Your gudgeons must be kept alive in a tin kettle:

take one and stick the hook through either his upper lip or back fin, and throw him into the likely haunts before-mentioned, swimming at mid-water. When the pike takes it, let him run a little, as at the *snap*, and then strike him. In this method of pike fishing, you may take three kinds of fish, viz. pike, perch, and chub.

These fish are to be met with in most of the lakes of Europe, but the largest are those taken in Lapland, which, according to Schœffer, are sometimes eight feet long: the largest fish of this kind which I ever heard of, weighed, to the best of my memory, thirty-five pounds. A drawing of this fish I saw in the kitchen of Sir Richard Hill, of *Hawkestone, Salop*.

At the Marquis of Trentham's canal, at *Trentham*, a pike seized the head of a swan, as she was feeding under water, and gorged so much of it as killed them both.

Small fish show the same uneasiness and fear at the presence of this tyrant, as the little birds do at the sight of the hawk or owl.

Rules to be observed in trolling. *September* and *October* are the best months for *trolling*, because the weeds are then rotten, and the fish are fat with the summer's feed. *March* is the best for the *snap*, because, as I have said before, they then spawn, and are sick, and therefore never bite freely.

A large bait most entices the pike, but a small one takes him with greater certainty.

Always, both at *troll* and *snap*, cut away one of

the fins, close at the gills of the bait fish, and another at the vent on the contrary side, which makes it play better.

Let no weeds hang on your bait, for if they do, the pike will not touch it: and always throw it into the water gently.

When you have a bite, and the fish goes down the stream, it is commonly a small one; but on the contrary, if he sails slowly upwards with the bait, it is a sign of a good one; great fish in general bite more calmly than small ones; for the small ones snatch and run away with the bait without any deliberation, but old fish are more wary.

Be careful how you take a pike out of the water, for his bite is venomous; therefore if you have not a landing net, put your finger and thumb into his eyes, and take him out that way.

Both at *troll* and *snap*, always have one or more swivels on the line, which will prevent its kenking, and make it play better in the water.

Whenever you find your *bait-fish* water-sopt, change it directly. The hooks for this fish are various.*

THE PERCH (*PERCA FLUVIATILIS*)

Is bow-backed like a hog, and armed with stiff bristles, and his sides with dry thick scales. He is a very bold biter, which appears by his daring to

* For farther information respecting the pike, see Nobbs's Art of Trolling, at the end of the Volume.

venture upon one of his own kind with more courage than even the ravenous luce. He seldom grows above two feet long, spawns once a-year, either in *February* or *March*, and bites best in the latter part of the Spring.

Our perch, and that of Aristotle and Ausonius, are the same. It was much esteemed by the Romans, nor is it less admired at present, as a firm and delicate fish; the Dutch, indeed, are particularly fond of it when made into a dish called *water-souchy*. The perch is a fish very tenacious of life: they are often carried near sixty miles in dry straw, and survive the journey. One was once taken in the Serpentine-river, Hyde-park, that weighed nine pounds; but that is very uncommon. The colours are beautiful; the back and part of the sides being of a deep green, marked with five broad black bars pointed downwards; the belly is white, tinged with red, the ventral fins of a rich scarlet; the anal fins and tail of the same colour, but rather paler.

His *haunts* are chiefly in the streams not very deep, under hollow banks, a gravelly bottom, and at the turning of an eddy. If the weather is cool and cloudy, and the water a little ruffled, he will bite all day long, especially from eight to ten in the morning, and from three till six in the evening. If there are thirty or forty of them in a hole they may be all caught at one standing: they are not like the solitary *pike*, but love to accompany one another, and swim in shoals, as all fishes which have scales are observed to do. His baits are *minnows*, little

frogs, or *brandlings*, if well scoured; when he bites give him time enough; and you can hardly give him too much, for as he is not a leather-mouthed fish, unless you do, he will often break his hold. Angle for him, if you bait with brandling, with an indifferent strong line, and *gut* at bottom, your hook No. 4, 5, or 6, and about five or six inches from the ground. But if you rove for him with a *minnow* or *frog* (which is a very pleasant way) then your line should be strong, and the hook armed with gimp, and the bait swimming at mid-water suspended by a cork float. I, for my own part, always use my troll, that in case a pike should take it, I may be prepared for him. Keep your *minnows* in a tin kettle, and when you bait with one, stick the hook through the upper lip or back fin. If you use the *frog*, stick it through the skin of his hind leg. These directions being carefully attended to, I dare insure the angler success.

The *perch* is much esteemed in Italy, especially when small: *Gesner* prefers the *perch* and *pike* to the trout, or any fresh fish. The *Germans* say proverbially, *more wholesome than a perch of the Rhine!*

THE TENCH (*TINCA*)

Is called the fish's physician, because its slime is said to be very healing to wounded fishes; and, what is more strange, the voracious pike is so sensible of his sovereign virtue, that he will not hurt a tench, although he will seize any other fish of his own size that comes in his way; and when he or any

other fishes are sick, they find relief by rubbing themselves against his body. He is a delicious fresh-water fish; has small scales, yet very large and smooth fins, a red circle about the eyes, and a little barb hanging at each corner of his mouth. His *haunts* are chiefly in ponds among weeds; he thrives very ill in clear waters, and covets to feed in foul ones; yet his flesh is nourishing and pleasant.

The tench is esteemed a most delicate food; but the Germans dislike it; for Gesner says, that it is insipid and unwholesome. It does not commonly exceed four or five pounds in weight; but has been met with of a much larger size.

They spawn the beginning of *July*: the proper time to angle for them is early and late in the months of May, June, the latter end of July, and in August. You must use a strong line with *gut* at bottom. The hook, No. 2 or 3, and a quill-float; the depth about two feet. He bites best at *red-worms*, if you dip them first in tar; at all sorts of paste made up with strong-scented oils; and at one made with the inside of a roll and honey. Also at *cad-worms*, *lob-worms*, *flag-worms*, *gentles*, *marsh-worms*, and soft boiled *bread-grain*. Besides the river *Stour* in *Dorsetshire*, so particularly recommended for plenty of *tench* and *eels*, there is *Brecknock Mere*, in *Brecknockshire*, being two miles in length, and as much in breadth, full of *perch*, *tench*, and *eels*.

N. B. *One river tench is worth ten of a pond.*

THE FLOUNDER* (*PASSER FLUVIATILIS*)

MAY be fished for all day, either in swift streams, or in the still deep, but best in the stream, in the months of April, May, June, and July. Your line must be a single-haired one, with a small float, and the hook, No. 6 or 7. Let your bait touch the ground, and it may be any sort of small *worms*, *wasps*, or *gentles*. But being a fish seldom taken with the rod and line, to enlarge on the subject would be unnecessary.

THE CHUB (*CAPITO SEU CEPHALUS*)

Is a fish by no means in much esteem, his flesh being very coarse, and full of small bones; yet he affords good sport to the angler, especially to a *Tyro* in that art.

This fish takes its name from its head, not only in the English, but in other languages; it is called *chub*, according to Skinner, from the old English *cop*, a head; the French in the same name, call it *testard*; the Italians, *capitone*. It does not grow to a large size: we seldom meet with them above five pounds weight; but Salvianus speaks of eight or nine pounds weight.

They spawn about the beginning of *April*; and their *haunts* are chiefly in large rivers, having

* The Flounder, and all other flat fish, are distinguished by one invariable characteristic, viz. that of having both the eyes on the same side the head.

clayey or sandy bottoms, in holes, shaded with trees; where many of them in general keep together. He bites best from sun-rising till eight, and from three till sun-set. In March and April you must angle for the chub with *worms*, in June and July, with *flies*, *snails*, and *cherries*; but in August and September, use a paste made of *Parmesan* or *Holland cheese*, pounded in a mortar with a little butter, and a small quantity of saffron put to it to make it of a yellow colour. In the winter, when the chub is in his prime, a paste made of *Cheshire cheese* and *turpentine*, is very good; but no bait more killing for him, than the *pith* of an ox or cow's back-bone: you must take the tough outward skin off very carefully, but take particular care that you do not bruise the inward skin; also the brains of the above animals are excellent for him. Let your line be very strong, with a quill-float on it, strong *gut* at bottom; the hook, No. 3 or 4; the depth, in hot weather, mid-water; in coldish, near the bottom; and in quite cold weather, on the ground. The most pleasant way of taking him is by dibbing, which is thus performed: in a hot summer's day go to any hole that you know they haunt, and you will find perhaps thirty or forty of them basking themselves on the surface of the water; then take your rod, which must be very strong and long, your line the same, but about a yard in length, and bait the hook with a *grass-hopper*: you must shelter yourself behind some bush or stump of a tree, so as not to be seen; for the chub is very timorous, and the least shadow will

make him sink to the bottom, though he will soon rise again. Having therefore fixed your eye upon the largest and best, drop your bait with great caution before him, and he will instantly take it, and be held fast; for he is a leather-mouthed fish, and seldom breaks hold if played properly.

N.B. In dibbing, where you cannot get a grasshopper, any fly, beetle, or moth, will equally answer the purpose.

When you are roving for perch with a minnow you will often take large chub.

The fearful *chevin* loves the shaded stream,
Sharp rills delight the *trout*, and pools the *breem*:
In deeps, the speckled *samlet* loves to rove,
And marly swifts allure the *barbel* drove;
Unwary *roach* the sandy bottom choose,
And *carp* the weeds, and *eels* the muddy ooze.

MOSES BROWNE.

THE BARBEL (*BARBUS*),

So called on account of the barb, or beard, that is under his nose or chops, is a leather-mouthed fish; and though he seldom breaks his hold when hooked, yet if he be large, he often breaks both rod and line. The male is esteemed much better than the female, but neither of them is very delicate. They swim in great shoals, and are at the worst in *April*, at which time they spawn, but soon come into season again: the places they chiefly frequent are weedy, gravelly rising grounds, in which this fish is said to dig, and rout his nose like a swine. In the Summer he frequents the strongest and swiftest

currents of water, as under deep bridges, weirs, &c. and is apt to settle himself amongst the piles, hollow places, and in moss and weeds. In the Autumn he retires into the deeps, where he remains all the Winter and beginning of the Spring. The best baits for him are *salmon-spawn*, *lob-worms*, *gentles*, bits of *cheese* wrapt up in a wet linen rag to make it tough, or steeped in honey for twenty-four hours; and *greaves*: Observe, that the sweeter and cleaner your baits are kept the more eager he takes them. You cannot bait the ground too much for him, when you angle with any kind of garbage: as *lob-worms*, cut in pieces, *malt* and *grains* incorporated with *blood* and *clay*, &c. The earlier and later you fish for him in the months of June, July, and August, the better. Your rod and line must be very strong; the former ringed, and the latter with gimp at the bottom, but I think twisted gut is better: a running plummet must be placed on your line, which is a bullet* with a hole through it: place a large shot a foot above the hook, to prevent the bullet falling on it. The worm will, of course, be at the bottom, for no float is to be used, and when the barbel takes the bait, the bullet will lie on the ground, and not choak him. By the bending of your rod you will know when he bites, and also when your hand will feel him give a strong snatch; then strike him, and he will be your own,

* I have found lately that the flat plummet is much better.

if you play him well ; but if you do not manage him with dexterity, he will break your tackle. You must have on your rod a winch, and a line on it about thirty yards long.

Barbels are the worst and coarsest of fresh-water fish, and seldom eaten but by the poorer sort of people, who sometimes boil them, with a bit of bacon to give them a relish. They are sometimes taken of the length of three feet, and eighteen pounds in weight.

The most famous places near *London* for barbel-angling are *Kingston-bridge*, and *Shepperton-deeps* ; but *Walton-deeps*, *Chertsey-bridge*, *Hampton-ferry*, and the holes under *Cooper's-hill* are in no respect inferior. You may likewise meet with them at all the locks between *Maidenhead* and *Oxford*.

N. B. Their spawn acts as a violent cathartic and emetic. The liver is unwholesome.

The hooks for this fish, No. 1 or 2.

THE EEL (*ANGUILLA*).

AUTHORS in natural history, in regard to the eel, have advanced various conjectures ; and in some measure contradicted each other entirely on this head, namely : whether they are produced by generation or corruption, as worms are, or by certain glutinous drops of dew, which falling in May and June, on the banks of some ponds or rivers, are by the heat of the sun turned into eels. Abr. Mylius, in a treatise on the *origin of animals*, describes a method of producing them by art. He

says, that if you cut up two turfs covered with May-dew, and lay one on the other, the grassy side inwards, and thus expose them to the heat of the sun, in a few hours there will spring from them an infinite quantity of eels. The doctrine of spontaneous or equivocal generation is now universally exploded; and all the phenomena that seem to support it are accounted for on other principles. These conjectures are therefore all nonsense; for the immediate generation of *eels*, has been sufficiently proved to be effected in the ordinary course of nature, and that they are viviparous. Eels are distinguished into four kinds, viz. the *silver eel*: a greenish *eel*, called a *grey*: a blackish *eel*, with a broad flat head; and lastly, an *eel* with reddish fins. The *eel's haunts* are chiefly amongst weeds, under roots and stumps of trees, holes, and clefts in the earth both in the banks and at bottom, and in the plain mud; where they lie with only their heads out, watching for prey: also about flood-gates, wears, bridges, and old mills, and in the still waters that are foul and muddy; but the smallest eels are to be met with in all sorts of rivers and soils. They conceal themselves in the Winter for six months in the mud, and seldom rove about in the Summer in the day time, but all night long; when you may take a great number of them, by laying in night-lines, fastened here and there to banks, stumps of trees, &c. of a proper length for the depth of the water, leaded so as to lie on the ground, and a proper eel-hook whipped on each, baited with the

following baits, which they delight in, viz. *garden-worms* or *lobs*; *minnows*, *hen's-guts*, *fish-garbage*, *loaches*, *small gudgeons*, or *miller's thumbs*; also small *roach*, the hook being laid in their mouths. There are two ways to take them in the day time, called *sniggling* and *bobbing*. *Sniggling* is thus performed: take a strong line, and bait your hook with a large *lob-worm*, and go to such places above-mentioned where eels hide themselves in the day-time: put the bait gently into the hole, by the help of a cleft stick, and if the eel is there he will certainly bite, let him tire himself by tugging, before you offer to pull him out, or else he will break your line. The other method is called *bobbing*. In order to perform this you must scour some large *lobs*, and with a needle run a twisted silk, or worsted, through as many of them from end to end, as will lightly wrap a dozen times round your hand; make them into links, and fasten them to strong pack-thread or whip-cord, two yards long, then make a knot in the line about six or eight inches from the worms, afterwards put three quarters of a pound of lead, made in a pyramidal form, on the cord; the lead must be made hollow three parts of the way up it, and then a hole must be bored through it, big enough to put the cord through, and let the lead slide down to the knot. Then fix all to a manageable pole, and use it in muddy water. When the fishes tug, let them have time to fasten, then draw them gently up, and hoist them quick to shore. A boat called a *punt* is very useful in this kind of

fishing. Some use an *eel spear* to catch eels with, which is an instrument with three or four forks or jagged teeth, which they strike at random into the mud.

The *Conger eel* grows to an immense size: it has been taken ten feet and a half long, and eighteen inches in circumference in the thickest part. The best way to kill eels, is to strike them on the navel.

The rivers *Stower* in *Dorsetshire*; *Ankham* in *Lincolnshire*; and *Irk* in *Lancashire*; are famed by their respective neighbours for very excellent eels. *Pope* has celebrated the river *Kennet*, in *Berkshire*, on the same account in his *Windsor Forest*:

The *Kennet* swift, for silver eels renown'd.

In *Ramsey-mere*, *Huntingdonshire*, are a great quantity of eels and large pike, which they call *hagest*; but *Cambridgeshire* boasts of having the most and best eels, if you credit the natives.

Eel-pouts, another fish somewhat resembling the eel, but more esteemed, are also found in some rivers. Their haunts are the same as the eel's, and they are to be taken in thunder and heavy rain, when they leave their holes. The best bait is a small gudgeon. Hooks, the double or single ones.

THE ROACH (*RUTILUS, SEU RUBELLIO,*)

Is as foolish as the carp is crafty: he is by no means a delicate fish: the river roach are much better than those bred in ponds. They spawn in *May*, and will bite all day long, on the top of the

water, if the weather is not in either of the extremes. Their *haunts* are chiefly in sandy or gravelly deep waters ; delighting to be in the shade. In April their baits are *cads* and *worms*. In Summer, white *snails* or *flies*. In Autumn, a paste made of fine white bread, moulded in your hands with water, and a little cotton added to it, to keep it from washing off the hook. In Winter, *gentles* are the best bait. You should fish with a line made of single hairs, a quill-float, and the lead about a foot from the hook ; and when you angle for roach always cast in a ground bait, made of bran, clay, and bread, incorporated together ; and when you angle with tender baits, always strike at the least nibble that is apparent. *Sprouded malt*, the young brood of *wasps*, *bees* dipt in *blood*, and the dried *blood* of *sheep*, are nostrums in this kind of angling.

For ground-baits, let the considerate angler content himself with moulding bran and clayey soil well together, and throw it in, in small balls, about the size of an egg.

The largest roach in this kingdom are taken in the *Thames*, where many have been caught of two pounds and a half weight ; but roach of any size are hard to be taken without a boat.

Red-paste is an excellent bait coloured with vermillion or red-lead, as I have before laid down, but it is best to take with you *gentles*, *white-paste*, and their other baits, as they are very fond of change, and will refuse one minute what they will take the next. Their hooks, No. 11 or 12.

THE RUD (*ORFUS GERMANORUM*),

Also called the *Oerve*, or *Nersling*, I think is the *bastard-roach* which old Walton speaks of; they are found chiefly in the channel, near Oxford, and in the fens, near Holderness. It appears to be the same fish with the *Shallow* of the Cam.

“The rud, a kind of roach, all tinged with gold,
Strong, broad, and thick, most lovely to behold;
High on the surface will with freedom bite
At small red-worms, or flies, his like delight;
But, angler, when you’ve hooked him, then take care:
He struggles long, and breaks the single hair.”

MOSES BROWN.

THE DACE OR DARE (*LEUCISSUS*).

THIS fish, and the roach, are much of the same kind; therefore, the directions given for one will serve for the other. They spawn about the middle of March, and will take any fly, especially the *stone-cadew-fly*, *May-fly*, the latter end of April and most part of May; and the *ant-fly* in June, July, and August. When you angle for the dace with the *ant-fly* under water, let it be about two hands breadth from the ground. They never refuse a fly in a warm day on the top of the water. The best bait in the Winter, is the *earth-bob*, which is the spawn of the beetle, and is to be found by following the plough in sandyish grounds: put

them into a vessel with some of the earth from whence they are taken, and use them all the Winter as an excellent bait, as I have before-mentioned in the description of baits. As for your line, &c. the directions given for the roach, will serve in all respects for the dace or dare.

Dace may be also taken with flesh-flies, upon the surface of the water ; into whose backs, between the wings, you must put your hook, which should be very small. They bite in the morning and evening ; you must then provide a *cane-rod*, which is the lightest of any, and let it be seventeen feet, at least, in length, and your line, which should, from the middle downwards, consist of single-hairs, be a little longer than your rod ; then provide a sufficient quantity of *house-flies*, which keep in a phial, stopped with a cork. With these repair, especially about seven or eight o'clock in a Summer's evening, to a *mill-stream*, and having fixed three or four hooks, with single-hair-links, not above four inches long, to your line, bait them with the flies, and angle up the surface of the water on the smoothest part, at the end of the *stream* : the dace will rise freely, especially if the sun does not shine on that part of the water where you cast the flies, and you may take two or three at a time. This sport will continue as long as day-light will permit you to see the flies. In the same manner dace will also rise at the *ant-fly* upon the surface of the water, if used in the morning at the foot of a *current* or *mill-stream*, or on the scour before the sun comes on the water.

If the water is high, so as to be almost equal with its banks, take your *fly-rod*, and fasten to your rod an *artificial-fly*, called the *caterpillar-fly*, or a small *red-palmer*: then take a large *yellow-gentle*, the yellower the better, run the hook through the skin of it, and draw it up to the tail of the *fly*; this being done, whip it on the surface of the water, and if you are diligent and expert, you will have good diversion. If you angle where two *mill-streams* are going at the same time, let it be in the eddy between the two streams: first make use of your plummet; if the water is deep, angle within a foot of the bottom, and perhaps you will find but poor sport; but if it proves to be shallow, that is, about the depth of two feet, or not exceeding three, your sport may be better. Bait your hook with three large *gentles*, use a *cork-float*, be very attentive and strike at the very first bite; if there are any large *dace* in the *mill-pool*, they will resort to the eddy between the two streams.

This fish, like the roach, is gregarious, haunts the same places, is a great breeder, very lively, and during the Summer is very fond of frolicking near the surface of the water; it is seldom above ten inches long; but has been taken of one pound and a half weight.

N. B. Whenever you fish for *roach* or *dace*, at ground, unless you use a ground-bait, the attempt is almost useless; after great heats, when the weather gets cool, you will be sure to have good sport.

The hooks, No. 11 or 12.

THE GUDGEON (*GOBIUS FLUVIATILIS*)

Is a fish that affords the young angler an amazing deal of diversion ; as it bites very freely and when struck is never lost, being *leather-mouthed*. They spawn three or four times in the Summer, and their feeding is like the barbel's in the streams and on gravel, slighting all manner of flies. Their baits are chiefly *wasps*, *gentles*, and *cads*, but the small *red-worm* is best. When you angle for them, be provided with a *gudgeon-rake*, with which rake the ground every ten minutes, which gathers them together. A single-haired-line is best, with a quill or cork-float, according to the rapidity of the stream ; your hook, No. 8 or 9, and your bait on the ground. You may angle for him with a running line, by hand, without a float.

The gudgeon is of a small size ; those few, however, that are caught in the *Kennet* and *Cole*, are three times the weight of those taken elsewhere. One was once taken near Uxbridge, that weighed half a pound.

THE POPE OR RUFF (*PERCA FLUVIATILIS*,
MINOR SEU AURATA).

THIS fish is small, rarely larger than a gudgeon ; in shape very like the perch, but better food, being in the taste as pleasant as any fish whatever.

It is armed with spines like the perch, but has

only one back fin. It is of a dirty green, almost transparent, and spotted with black. It seldom exceeds six inches in length.

Its *haunts* are in the deepest running parts of a gravelly river, the exact bottom whereof, having found by plumbing, bait your hooks with small *red-worms* or *brandlings*; for you may angle with two or three, and have excellent sport. He bites very greedily, and as they swim in shoals, you may catch twenty or thirty at one standing, in a cool, gloomy day. Always bait the ground with earth, and use the same tackle as for the gudgeon. The river *Yare* in *Norfolk*, is almost peculiar for plenty of ruffs.

Hook No. 9.

THE BLEAK OR BLEY (*ALBURNUS*).

ON account of its eagerness to catch flies, is called, by some, the *river-swallow*; and by others, the *fresh-water-sprat*, because of its resemblance to the *sea-sprat*. He bites very eagerly at all sorts of *worms*, *flies*, *pastes*, and *sheep's blood*. You may fish for him with six or seven small hooks at a time. He is an excellent fish to initiate a young angler in *fly-fishing*, by his whipping for them in a hot Summer's evening, with a small artificial black gnat. Your tackle must be fine and neatly formed. He is a capital bait for the pike.

Hook, No. 13.

THE MINNOW OR PINK (*VARIUS, SEU*
PHOXINUS LÆVIS),

THOUGH one of the smallest fish, is as excellent to eat as any of the most famed. They are generally found in March and April, and remain till the cold weather compels them to retire to their Winter quarters. He is of a greenish, or wavy sky colour, his belly very white, his back blackish; and is an excellent bait for any of the fish of prey; as the pike, trout, perch, &c. His baits are small *red-worms, wasps, cads, &c.* If you can catch enough of them, they will make an excellent tansey, their heads and tails being cut off; and fried in eggs, with a sauce made of butter, sugar, and verjuice.

The smallest of hooks.

THE LOACH OR LOCHE (*COBITES FLUVIATILIS*
BARBATULA).

THIS fish is very small, but eats very well, and is nourishing food for sick persons.

The loach is the first genus of *abdominal fishes*, or those which have the ventral fins behind the pectoral, that is, nearer the tail, as in the salmon. It never exceeds four inches in length.

It is found in clear swift brooks and rivulets, and its food is gravel. It is bearded like the barbel, and freckled with black and white spots. You may

take it with a *red-worm*, at ground : delighting to be near the gravel, and hardly ever seen on the top of the water.

The smallest of hooks.

THE BULL-HEAD OR MILLER'S-THUMB

(*GOBIO FLUVIATILIS*).

THIS fish, on account of its ugliness, is in some places called the *fresh-water-devil* ; has a broad head and a large mouth, no teeth, but the lips are like a file, with which it nibbles at the bait. They spawn in April, and are full of spawn most of the Summer. Their haunts in Summer are chiefly in holes, or amongst stones in clear-water ; but in Winter they lie in the mud like the eel. The worst of anglers may take this fish ; for if you look above the water in a hot day, you may see him sunning himself on a flat stone, put your hook upon it, baited with a small *red-worm*, and he will take it directly. The taste of this fish is very good.

Hook, No. 13.

THE STICKLEBACK, SHARPLING, OR BANSTICKLE (*PISCIS ACULEATUS VULGARIS*).

THIS fish, with three names, is a small prickly fish, and not worth the angler's notice, but that it is an excellent bait for the trout, who will take it sooner than the minnow. The prickles must be broke off and baited according to the directions given for

baiting the minnow, under the description of the trout.

THE GUINNIAD * (*ALBULA SALMONI SIMILIS*),

ACCORDING to Camden and others, is peculiar to *Pemle-Mere* in *Cheshire*. “The river *Dee*” says this author, “which runs by *Chester*, springs in *Merionethshire*, it passes through the said *Pemle-Mere*, which is a large water, and it is observed, that though the river *Dee* abounds with *salmon* and *Pemle-Mere* with *guinniad*, yet there are never any *salmons* caught in the *Mere*, nor any *guinniads* in the river.”

THE RED CHARR, OR WELCH TORGOCH

(*UMBRA MINOR*),

Is a fish whose make is longer and more slender than that of a trout, for one of about eight inches long was no more than an inch and a half broad. The back is of a greenish olive, spotted with white. The belly, about the breadth of half an inch, is painted with red, in some of a more lively, in others of a paler colour, and in some, especially the female, it is quite white. The scales are small, and the lateral lines straight. The mouth is wide, the jaws pretty equal, except the lower, which is a little

* *Hulse-water* fishermen, in 1775, took near eight thousand at one draught. It is about eleven inches long.

sharper and more protuberant than the upper. The lower part of the fins, are of a vermilion dye. The gills are quadruple, and it has teeth both in the jaws and on the tongue ; in the upper jaw there is a double row of them. The swimming-bladder is like that of a trout ; the liver is not divided into lobes ; the gall-bladder is large ; the heart triangular ; the spleen small and blackish ; and the eggs of the spawn large and round. The flesh is more soft and tender than that of a trout, and when boiled can scarcely be allowed to be red. It is in the highest esteem where known, and in *Wales* is accounted the chief dish at the tables of people of fashion.

The chief place in *England* where this fish is taken is *Winander-Mere* ; but in *Wales* they are to be had in five different places ; viz. *Llamberris*, *Llia-Umber*, *Festiniog*, and *Beltus*, in *Caernarvonshire*, and near *Casageddor*, in *Merionethshire*. In this last county they are smaller than in the former, and are taken in October ; but in *Caernarvonshire*, in one of the lakes, they are caught in November ; in an other in December, and in the third in January ; and when the fishing in one ends, it begins in another. Dr. Leigh says, the *charr*, in *Consington-Mere*, which is not far from *Winander-Mere*, are much better, but there are reasons to suppose he was prejudiced in this respect. They swim together in shoals, and though they appear on the surface of the water in the Summer-time, yet they will not suffer themselves to be taken, either with the angle, or with nets : therefore the only

season for fishing is when they resort to the shallow parts of the lakes to spawn. At these times they set trammel nets, baited, leaving them for whole days and nights, and the fish enter them of their own accord.

THE GUILT,* OR GILT CHARR

(*CARPIO LACUS BENACI*),

THE Latin writers called the gilt-charr, "*Carpio lacûs Benaci*," because they imagined it was only to be met with in that particular lake, where it is called *roetel*; but it has since appeared to be the same fish with our gilt-charr, which is bred in *Winander-Mere*, in the county of *Westmoreland*. It is proportionably broader than the trout, and the belly is more prominent; but its length, when greatest, never exceeds twelve inches: the scales are small, the colour of the back is more lively than that of the trout, and is beautified with black spots; the belly and sides, beneath the lateral line, are of a bright silver colour. The skull is transparent, and the snout blueish: it has teeth in the lower jaw, on the palate and the tongue: the swimming-bladder is extended the whole length of the back, and the gall-bladder is large. The flesh of the gilt-charr is red, and is accounted so very delicious amongst the

* The inhabitants of *Westmoreland* distinguish the *charrs* into different kinds according to their colours; but they appear to be rather varieties.

Italians, that they say it excels all other pond and sea-fish whatever; and they esteem it very wholesome.

Some have doubted whether the *Welch* and *English* fish are of the same kind or not; but Mr. Ray thinks there is no room to doubt it. The *Welch* name *Torgoch*, signifies a red belly, which distinguishes the *red-charr* properly enough; the *gilt-charr* is, indeed, quite a different species, and is about twice as small as the red: the belly of the former is red, the flesh white, and the spots on the back white likewise; whereas the belly of the latter is of a silver colour, the flesh red, and the back is spotted with black.

“The charr and guinniaid never change their shires,
But live in Winander and Pemble-Meers.”

GOLD AND SILVER FISHES.

THESE fish are quite naturalized in Europe, and breed as freely in the open waters as the common carp. They were first introduced into England about the year 1691, but were not generally known till 1728, when a great number were brought over, and presented first to Sir Matthew Dekker, and by him circulated round the neighbourhood of London, whence they have been distributed to most parts of the country. In China the most beautiful kinds are taken in a small lake in the

province of Che-thyang. Every person of fashion there keeps them for amusement, either in porcelain vessels, or in the small basons that decorate the courts of the Chinese houses. The beauty of their colours, and their lively motions, give great entertainment, especially to the ladies, whose pleasures, by reason of the cruel policy of that country, are extremely limited. In form of the body, they bear a great resemblance to the carp. They have been known in Europe to arrive at the length of eight inches : in their native place they are said to grow to the size of our largest herring. Their nostrils are tubular, and form a sort of appendages above the nose ; the dorsal fin and the tail vary greatly in shape ; the tail is naturally bifid, but in many is trifid, and in some even quadrifid ; the anal fins are the strongest characters of this species, being placed not behind one another as in other fish, but opposite each other, like the ventral fins. Their colours vary greatly ; some are marked with a fine blue ; with brown, and with bright silver ; but the general predominant colour is gold, of amazing splendor.

ADDENDA—BAITS.

MINNOW-FISHING comes in about the middle of March, and continues till the latter end of August ; it is a most excellent bait, very destructive, of strong exercise, being always in motion, and affords the angler variety of sport. To be angled with at any time of the day from sun-rise till sun-set, and takes the best and largest fish.

Cod-bait-fishing comes in about a fortnight in May, and continues till about the middle of June : it is a very killing-bait and will take almost every sort of fish, in deep-standing-waters, as well as in streams mornings and evenings, till the middle of June.

Maggot, or gentle-fishing comes in about the beginning of May, and continues till the latter end of February, in the next year : it is the best and most killing ground-bait that ever was made use of ; it will take every sort of fish that swims in fresh-water, except salmon or pike.

Grasshopper-fishing comes in about the latter end of June, and continues till the latter end of August. It is a curious fine bait, very natural to fish, but very tender ; to be drawn upon a leaded hook, No. 2, after the same manner as the cod-bait, and will take almost all sorts of fish, as pike, trout, greyling, perch, chub, roach, dace, &c. &c.

Cabbage-worm-fishing comes in about the middle of June, and continues in their successive flights till the latter end of October. There are three sorts of which the fish are remarkably fond, and are equal in goodness to the cod-bait and grasshopper, and will take the same sorts of fish.

Worm, or Bottom-fishing, comes in about the middle of February, if the weather is mild, and continues good all the year; you may fish with a worm, all or any time of the day, if the water is discoloured by rain; but if low, clear, and fine, only mornings and evenings; it is the most general bait we have, and will take every kind of fish; the proper worms for angling are fully described in this treatise.

“As in successive course the seasons roll,
So circling pleasures recreate the soul:
When genial spring a living warmth bestows,
And o’er the year her verdant mantle throws,
No swelling inundation hides the grounds,
But crystal currents glide within their bounds;
The finny brood their wonted haunts forsake,
Float in the sun, and skim along the lake;
With frequent leap they range the shallow streams,
Their silver coats reflect the dazzling beams,
Now let the fisherman his toils prepare,
And arm himself with every wat’ry snare;
His hooks, his lines peruse, with careful eye,
Increase his tackle, and his rod re-tie.”—GAY.

Happy England! (says an elegant writer) where the sea furnishes an abundant and luxurious repast,

and the fresh-waters are innocent and harmless pastime ; where the angler, in cheerful solitude, strolls by the edge of the stream, and fears neither the coiled snake, nor the lurking crocodile ; where he can retire at night, with his few trout (to borrow the charming description of old Walton) to some friendly cottage, where the landlady is good, and the daughter innocent and beautiful ; where the room is cleanly, the sheets smelling of lavender, and twenty ballads stuck about the wall ! There he can enjoy the company of a talkative brother angler, have his trout dressed for supper, tell tales, sing old tunes, or make a catch ! There he can talk of the wonders of Nature, with pious admiration, or find some harmless sport to content him, and pass away a little time, without offence to God, or injury to man !!

CHAP. VI.—*The most scientific method of making Fish Ponds, Stews, &c. to which are added several Arcana in the Art of Angling*

It is agreed, that those grounds are best that are full of springs, and apt to be moorish : the one breeds the fish well, and the other preserves them from being stolen.

The situation of the pond is also to be considered, and the nature of the currents that fall into it ; likewise that it be refreshed with a little brook, or with rain-water that falls from the adjacent hilly ground. And that those ponds, which receive the stale and dung of horses, breed the largest and fattest fishes.

In making the pond, observe that the head be at the lowest part of the ground, and that the trench of the flood-gate, or sluice, has a good swift fall, that it may not be long in emptying.

If the pond carries six feet of water it is enough ; but it must be eight feet deep, to receive the freshes and rains that should fall into it.

It would be also advantageous to have shoals on the sides, for the fish to sun themselves in, and lay their spawn on ; besides in other places certain holes, hollow banks, shelves, roots of trees, islands,

&c. to serve as their retiring places. If your pond be a breeder, never expect any large *carp* from thence ; the greatness of the number of *spawn* overstocking the pond.

Mr. Tull, in order to prevent the excessive increase of fish in his ponds, first practised *castration* on them, which made them grow larger than their usual size. But I think the operation peculiarly cruel, and the purpose of it only a detestable piece of Apician refinement.

For large *carp* a store-pond is ever accounted best ; and to make a breeding-pond become a store-pond, see what quantity of *carp* it will contain ; then put in all *milters*, or all *spawners* ; whereby in a little time you may have *carp* that are both large and exceedingly fat. Thus by putting in one sex, there is an impossibility of the increase of them ; yet the *roach*, notwithstanding this precaution, will multiply. Reserve some great waters for the headquarters of the fishes, whence you may take, or wherein you may put, any quantity thereof. And be sure to have stews and other auxiliary waters, that you may convey any part of the stock from one to the other ; so to lose no time in the growth of the fishes, but employ your water as you do your land to the best advantage. View the grounds, and find out some fall between the hills, as near a flat as may be, so as to leave a proper current for the water. If there be any difficulty of judging of such, take an opportunity, after some sudden rain, or breaking up of a great snow in Winter, and you will

plainly see which way the ground casts; for the water will take the true fall, and run accordingly.

The condition of the place must determine the quantity of the ground to be covered with water. For example, I may propose fifteen acres in three ponds, or eight acres in two, and not less; and these ponds should be placed one above another, so as the point of the lower may almost reach the head or bank of the upper, which contrivance is no less beautiful than advantageous.

The head, or bank, which by stopping the current, is to raise the water, and so make a pond, must be built with the clay or earth taken out of the pan or hollow, dug in the lowest ground above the bank: the shape of the pan to be a half-oval, whereof the flat to come to the bank, and the longer diameter to run square from it.

For two large ponds, of three or four acres a-piece, it is advisable to have four stews, each two rods wide, and three long. The stews are usually in gardens, or near the house, to be more handy and better-looked to. The method of making them, is to carry the bottom in a continual decline from one end, with a mouth to favour the drawing them with a net.

It is proper to cast in bavins in some places not far from the sides, in the most sandy spots, for the fish to spawn upon, and to defend the young fry, especially the spawn of carp and tench.

ARCANA
IN
THE ART OF ANGLING.

To catch Fish.

TAKE *Coculus Indicus*, which is a poisonous narcotic, called also *baccæ piscatoriæ* (fisher's berries), and pound them in a mortar ; then make balls of the paste which will be produced (by adding a sufficient quantity of water), about the size of a pea, and throw them into a standing-water. The fish that taste of it will be very soon intoxicated, and will rise and lie on the surface of the water : put your landing-net under them, and take them out.

Coculus Indicus is a little berry, about the size of a bay-berry, but more of a kidney shape, having a wrinkled outside, with a seam running lengthways from the back to the navel : it is of a bitterish taste, being the fruit of a tree called *Naslalum*, bearing leaves in the shape of a heart, and bunches of five-leaved white flowers, which are succeeded by their berries. They grow in Malabar in the East Indies. They are seldom used in physic, being accounted

of a pernicious nature, but their principal use is for catching fish. The famous Cardan's celebrated receipt for this purpose runs thus : Take the berries of the *Oriental Cocus*, $\frac{1}{4}$ oz. ; of cummin and boiling water, each 2 oz. ; of cheese, 1 oz., and of meal 3 oz. ; after bruizing them together, form them into small balls. Others mix the berries with old cheese, honey, and wheaten-meal, of which they form small balls.

Ointments to allure Fish to Bite.

Take gum-ivy, and put a good deal of it into a box made of oak, and chafe and rub the inside of it with this gum. When you angle put three or four worms into it, but they must not remain there long, for if they do, it will kill them ; then take them out and fish with them, putting more in their places as you want them out of your worm-bag. Gum-ivy is the exudation from the body of large ivy-trees, is of a yellowish red colour, of a strong scent, and sharp taste ; that which is sold in the shops is good for nothing. Therefore, to get gum-ivy about Michaelmas, or in the Spring, drive several great nails into large ivy-stalks wriggle the same till they become very loose, and let them remain, and the gum will issue from the wounds.

Also slit several great ivy-stalks, at the time above-mentioned, and visit them once a month, and gather the gum which flows from the wounded part. This will very much improve the angler's success.

Take assa foetida, three drachms ; camphor, one ditto ; Venice turpentine, one ditto ; pound altogether in a mortar, with some drops of the chemical oil of lavender or spike. When you angle, anoint eight inches of your line with it, next your hook, and it is excellent for trout in muddy water, and for gudgeons in clear.

Assa foetida is a gummy juice of Laser, Laserpitium, or Sylphion, gathered from the root or stalk when cut open. Choose that which is pure, fine, and clammy, and smelling like garlic. It will keep many years, but is often adulterated.

Camphor is a resinous gum, partly flowing of its own accord, but chiefly by incision, from a tree growing in India : the Bornean Camphor is best. Choose that which is white and clear like crystal, strong-scented, will easily crumble between the fingers, and being set on fire is difficult to be extinguished. There is a fictitious sort, which being put into a hot loaf will parch, while the true will melt : it will keep many years in flax-seed if it is not exposed to the air, otherwise it will evaporate and consume to nothing.

I shall now give the reader the *ne plus ultra* of all these kind of ointments, composed by Mons. Charras, Apothecary-royal to Louis the XIV. Take cat's fat, heron's fat, and the best assa foetida, of each two drachms ; mummy, finely powdered, ditto ; cummin seed, finely powdered, two scruples ; and camphor, galbanum, and Venice turpentine, of each one drachm ; and civet two grains. Make them into a thinnish ointment, with the chemical oils of lavender,

annisseed, and camomile, and keep it in a narrow-mouthed, and well-glazed gallipot, covered with a bladder and leather, and it will keep two years. When you want to use it, put some into a small taper pewter-box, and anoint your bait with it, and about eight or nine inches of the line, and when it is washed off, repeat the unction.

“ All arts and shapes, the wily angler tries
To cloak his fraud, and tempt the finny prize :
Their sight, their smell, he carefully explores,
And blends the druggist's and the chemist's stores ;
Devising still with fancy ever new,
Pastes, oils, and unguents, of each scent and hue.”

How to make Fish Hooks.

In order to make a good hook, there are requisite—a *hammer*, a *knife*, a pair of *pincers*, an iron *semi-clean*, a *file*, a *wrest*, a *bender*, *tongs*, both long and short, an *anvil*, and steel *needles*, of different sizes. Heat a needle of the size you want, in a charcoal fire, and raise the beard with your knife, then let it cool. Sharpen the point, either with a file or on a grindstone, then put it into the fire again, and bend it into what shape you please ; make the upper part of the shank four square, and file the edges smooth, then put it into the fire a third time, and heat it gently : take it out suddenly and plunge it into water, and your operation is finished.

Use not a small hook for great baits, nor a large one for small ones :—*Barbel* and *chub* must have large ones, but *perch*, *tench*, *bream*, and *eels*, much

smaller. *Trout* in clear waters, *graylings*, *salmon-smelts*, *roach*, and *dace*, *ruffs*, and *gudgeons*, must have small hooks ; and, though many angle for *trout* with large hooks in thick waters, yet small ones are the best. Experience will point out the inconvenience of large hooks. The noble *salmon* alone must have a large one.

A Glue for Angling Rods.

Pour some water on quick-lime, until the ebullition ceases, then pour the water from it, and boil your glue very gently with this water, which will improve it much.

END OF THE FIRST PART.

...in the ...
...and ...
...and ...
...the ...
...the ...
...the ...

...the ...
...the ...
...the ...
...the ...
...the ...
...the ...

...the ...
...the ...
...the ...
...the ...
...the ...
...the ...

...the ...
...the ...
...the ...
...the ...
...the ...
...the ...

PART II.

THE
COMPLETE FLY-FISHER:

OR,

EVERY MAN HIS OWN FLY-MAKER.

“WITH pliant rod athwart the pebbled brook,
Let me with judgment cast the feathered hook,
Silent along the mazy margin stray,
And with a fur-wrought-fly delude the prey.
To frame the little animal, provide
All the gay hues that wait on female pride.
Let Nature guide thee: sometimes golden-wire
The shining bellies of the fly require;
The peacock's plumes thy tackle must not fail,
Nor the dear purchase of the sable's tail.
Each gaudy bird some tender tribute brings,
And lends the growing insect proper wings:
Silks of all colours must their aid impart,
And every fur promote the fisher's art.”

GAY.



THE COMPLETE FLY-FISHER.

CHAP. I.—*Observations concerning Artificial-Fly-Angling, with proper Directions for the Angler's Rods, Lines, &c.*

THE art of *artificial-fly-fishing* certainly has the pre-eminence over the other various methods that are used to take fish in the art of angling. It requires a great deal of ingenuity and attention; and the variety which attends it, makes it at once both pleasant and agreeable. The angler is not confined to any particular part of the water in fly-fishing, but roves from one place to another, trying his fortune, by throwing his flies into the different eddies, and the most likely places he meets with, to make a captive of the speckled trout: enjoying at the same time the harmonious warblings of the numerous songsters of the groves; beholding the diversity of the prospects spread around him, and gaining that health and serenity of mind, not to be purchased by all the riches in the universe. The

imitations of nature, in regard to the flies necessary for use; suiting the different colours so exactly as to resemble the natural fly; and observing the greatest nicety in regard to its symmetry; contribute to make it still more delightful. Whenever he makes a fly, let him have the natural one always before him, which will enable him to be a competent judge of the materials most necessary to dub it with; a list of which, and of the best way to make the *Palmer* and *May-fly*, (which are the ground of artificial-fly-angling), I shall give him by and by; for if he is not able to make his own flies, he never will be a good fly-fisher, nor experience that pleasure, which he will receive by taking fish with one of his own making. He must never think a fly ill made, because it will not kill fish as well in any other river as that he particularly angles in; because the same flies differ very much both in colour and size in different counties. Besides, *flies* that will be taken on their peculiar water one year in April, will not perhaps be taken in the next till the middle of May, the whole depending on the warmth or coldness of the season. I shall first give the angler a description of the rods and lines, best calculated for *artificial-fly-fishing*; but it must be remembered that theory, without practice, can never make a man a proficient.

Rods and Lines proper for Artificial-Fly Fishing, &c.

As for your *artificial-fly-rod*, the directions given

in the first part of this Treatise are sufficient, only be careful that the materials of which it is composed are well seasoned, and free from knots, and that the whole is exactly perfect in regard to symmetry.

The length of the fly-rod, is generally from about fourteen to seventeen feet long: which is long enough for any one who understands fly-fishing to throw twelve yards of line, with one hand, and seventeen with both.

To make a fly-rod, that will be exceeding neat and pleasant in hand, you must observe the following method.

Procure a nice breadth of ash plank, free from knots, perfectly sound, and about seven feet long; let it be turned in the lathe so as to run taper from the but-end, which should be just so thick that you can with ease grasp it in your hand. Then have it ferrelled, or bind it to a piece of hazel seven feet long, and in exact taper proportion to the ash. As you may not be able to get a piece of hazel so long, that will run perfectly taper, it may consist of two or three pieces; add to the hazel a nice piece of yew (in the same proportion to the hazel as that is to the ash) two feet long, made round, taper and smooth; and to that, piece a bit of small, round, and taper whale-bone, six inches long, the rod will then be completed; and if just symmetry is observed through the whole, it will be a most excellent one.

Some use deal for making the bottom of the rod, because they say it is more light; but I aver that it

is not half so strong and lasting, and that the ash, on account of its strength, may be turned in the lathe, or planed down to be every jot as light as the deal; and, that the angler, when he has hooked a good fish, need never fear its snapping short, as deal will, because it is the nature of the wood to bend almost double, and will always, if well seasoned, return to its former straightness. Let your rod, thus made, be ringed for the line to pass through, with small brass rings, about a foot distant from each other, and at the but-end let there be a spike made to screw in, which you will find very convenient; and you may, if you like to alter the colour of your joint, first warm it before the fire, and then dip a feather in *aqua fortis*, put it on the ash, and then chafe it in with your hand, and it will make it a cinnamon, or rather a *puce*, or flea colour.

Your fly-line should be about thirty yards long, and wound on a small brass multiplying winch, which is to be placed on the but of your rod. Then you must run the line through the rings before-mentioned, and you may always command the length without the trouble of changing the line, and shorten it when you come to places incumbered with wood. The general length that you should have off your reel must be about four yards longer than your rod, nay sometimes the line must be twice the length of the rod; for to *fish fine* and *far off* is the standing rule for trout fishing. But it will be a long time before you are able to throw a dib-line with nicety at the general length, yet as you can always lengthen

or shorten it by means of the winch, you may, if you are expert, and are a true lover of angling, after some trials accomplish it. Never encumber yourself with too much line at first, but increase the length of it as you find you make improvement; and as it is ten to one, that you lose a fly every time you cast your line, until you are arrived at some degree of perfection in doing it, it will not be amiss to practice some time without one. Your line should run taper from the top of your rod down to the fly, that is, if the first link is composed of thirty-five hairs, the next must be of thirty-four; so leaving out one hair in each link. till the whole is completed: then comes the silk-worm gut, on which you should whip all your hooks.

But the best lines for artificial-fly-angling are those that are wove, and are all one piece, and are to be bought at any of the shops in London where fishing-tackle is sold, and run taper like the lash of a coach whip, and may be had at any length.

These are the only lines that can be used on a winch; because they have no knots to prevent them running glibly through the rings of the rod.

By the line being made taper, you will be able to throw it into any place you like with a greater exactness, and it will fall much lighter on the water, which will very much increase your sport.

The directions which I have given the angler respecting his rods and lines, are the best I believe now extant. However, I would advise every young angler

to make a purchase of his first tackle at the London shops; where he will get rods and other tackle in the highest perfection, and neatness, which he should always be careful to keep in good order; and believe *neatness* in his tackle, and a *nice* and curious hand in all his work (particularly in *fly-making*) to be absolutely necessary.

CHAP. II.—*A List of the Materials necessary for an Angler and the best method to make the Palmer, (See Frontispiece Fig. 1.) and Green-drake, or May-fly, (Fig. 2.)*

Hog's Down,

COMBED from the roots of the bristles of *black, red, whitish, and sandy-coloured* hogs; the white down you may have dyed to any colour you like. It is excellent dubbing, because it will stand the water and shines well. To be a competent judge of the real colour of any dubbing, you must hold it between the sun and your eyes. This is a standing rule when you imitate a fly.

Camel's Hair.

Of a *dark and light* colour, and one in the medium of both.

Badger's Hair,

The *brown* soft fur which is on the skin, and the *blackest*.

Bear's Hair,

Gray, dun, light, and dark coloured, bright brown, and shining brown.

Spaniel's Hair,

From the different parts of a spaniel, especially from behind the ear, *brown, dark brown, light brown, and black.*

Sheep's Wool,

Of all colours, both *natural* and *artificial*; you may have it dyed to any colour.

Seal's Fur,

To be had at the trunk-makers'; get it dyed from the lightest to the darkest *brown*, and you will find it much better dubbing than cow or calves' hair.

Mohairs,

Of all colours, *black, blue, purple, white, violet, yellow and tawney, philomot* (from *feuille morte*, a dead-leaf), and *Isabella*, which is a whitish yellow, or soiled buff-colour.

Cow's-Hair,

The softest you can get from a *black, brindled* and *red-cow*; and of these colours, have *brown, dark brown, light brown, and black.*

Colt's or Calf's Hair,

These afford very good dubbing, and a variety, especially those hides that have been tawed, or dressed in a skinner's lime-pit; but, as I said before, seal's fur dyed is much better than either of the hairs of these two; because it is not so harsh, and does not require so much trouble to work on the hook; and observe further, that this fur is for small flies, and *hog's down* for large ones.

Camlets.

Both hair and worsted of all colours, *blue, yellow, dun, brown, dark brown, light brown, red, violet, purple, black, pink, and, orange.*

Furs

Off the *squirrel*, especially his tail; a *hare*, the part of the neck which is a withered fern colour; *fox-cub* from the tail where it is downy and of an ash colour; an old *fox* and old *otter, otter-chub, futimart*, or *filmert*: a *mole*, a *black cat's tail*; a *house-mouse*, and *water-rat*; a *marten*, particularly from off the gills, or spots under the jaws, which

is of a fine *yellow*. These are all to be had at the furriers.

Hackles.

These are the feathers that hang from the head of a *cock*, down his neck, and likewise near his tail, they are particularly used in making the *palmer fly*; get the following colours of them, viz. *red*, *dun*, *yellowish*, *white*, *orange*, and *black*; let not the fibres of them be above half an inch long. Whenever you meet with a *cock*, whose hackle is of a strong *brown red*, buy him, and make the most of the hackles. Note, the feathers of a *bantam* or *cock-chick*, are good for nothing.

Feathers.

To make the wings of artificial flies, &c. it is necessary to be provided with all kinds of feathers: procure, therefore, those from the back, and other parts of the wild *mallard* or *drake*; of a *partridge*, particularly the red ones in the tail; those of a *cock-pheasant's* breast and tail; also the wings of a *stare* or *starling*, *jay*, *land-rail*, *blackbird*, *throstle*, *fieldfare*, *water-coot*, and a *brown hen*; likewise the top, or cop, of a *pewit*, *plover*, or *lap-wing*, *peacock's* herl, green, copper-coloured and white, also black *ostrich's* herl, and feathers from the neck and wings of a *heron*. Observe, that in many instances hereafter that you will meet with, where the mallard's feather is set down for the wings of an artificial fly,

that the starling will be preferable, because it is of finer grain, and will not imbibe the water so much.

Carpets and Blankets.

There is very good dubbing to be got from *blankets*, also from an old *Turkey carpet*; untwist the yarn, and pick out the wool, then separate the colours, wrap them up in different papers, and lay them by.

Silks, &c.

In this drawer, which is the last, keep small, though strong *silk* of all colours, wrapt on little reels; also *raw silk*, gold and silver *flatted wire*, or *twist*; *hooks* in small chip boxes, with the number of the size of each marked on the outside: *wax* of all colours, and *needles*; a *sharp pen-knife*, and a small sharp pair of *scissars*, made quite angular, with large bows for the fingers.

N. B. When you make the *palmer-fly* suit the colour of the silk to the hackle you dub with; a *dun hackle* requires *yellow silk*; a *black hackle*, *sky-blue silk*; a *brown, or red hackle*, *red silk*; when you make flies that are not *palmers*, dub with silk that resembles the colour most predominant in the fly; and in making your flies remember to mix bear's hair and hog's down, with your other dubbing, because they repel the water; make your flies always in hot sun-shiny weather, for your waxed silk will then draw kindly; and when you take the dubbing

to imitate a fly, always wet it, and then you will be perfect in your imitation ; for although the dubbing when dry may suit, yet when it is wet it may be quite another colour. Marten's fur is the best yellow you can use.

How to make the Palmer-fly.

First lay all the materials by the side of you, viz. half a yard of fine round even *silk worm gut* ; half a yard of *red silk* well waxed with wax of the same colour, a hook, the size No. 6 ; a needle ; some strands of an *ostrich's* feather, and a fine *red hackle* : then take the hook, and hold it by the bend, between the fore-finger and thumb of your left hand, with the shank towards your right hand, and with the point and beard of your hook not under your fingers but nearly parallel with the tops of them : afterwards take the silk, and hold it likewise about the middle of it, with your hook, one part laying along the inside of it to your left hand, the other to the right ; then take that part of the silk which lies towards your right hand, between the fore-finger and thumb of that hand, and holding that part towards your left, tight, along the inside of the hook, whip that to the right, three or four times round the shank of the hook towards the right hand ; after which take the *silk worm gut*, and lay either of its ends along the inside of the shank of the hook, till it comes near the bend of it : then hold the *hook*, *silk* and *gut*, tight between the fore-finger and thumb of your left hand, and afterwards give that part of

the *silk* to your right-hand, three or four whips more over both *hook* and *gut* till it comes near the end of the shank, and make a loop and fasten it tight : then whip it neatly again over both silk, gut, and hook, till it comes near the bend of the hook : after which make another loop, and fasten it again : then if the gut should reach farther than the bend of the hook, cut it off, and your hook will be whipped on, and the parts of the silk hang from the bend of it.

Having proceeded so far, wax the longest end of the silk again, take three or four strands of an ostrich's-feather, and holding them and the hook, as in the first position, the feathers to the left-hand, and the roots of them in the bend of the hook with the silk that you waxed last, whip them three or four times round, make a loop, and fasten them tight ; then turning the strands to the right-hand, and twisting them and the silk together, with the fore-finger and thumb of your right-hand, wind them round the shank of the first hook till you come to the place where you fastened, then make a loop, and fasten them again ; if the strands should not be long enough to wind as far is necessary round the shank, when the silk gets bare you must twist others on it. Having performed this, take your scissars and cut the body of the palmer into an oval form, that is, small at the bend and the end of the shank, but full in the centre ; do not cut too much of the dubbing off. Now both the ends of the silk are separated, one at the bend, another at the end of the

shank, wax them both again : then take the hackle, hold the small end of it between the fore-finger and thumb of your left-hand, and stroke the fibres of it with those of your right, the contrary way from which they are formed ; hold your hook as in the first position, and place the point of the hackle in its bend, with that side which grows nearest the cock upwards, and then whip it tight to the hook ; but in fastening it tie as few fibres in as you can possibly avoid : the hackle being fast, take it by the great end, and, keeping the side nearest the cock to the left-hand, begin with your right-hand to wind it up the shank upon the dubbing, stopping every second turn, and holding what you have wound tight with your left-fingers, whilst with the needle you pick out the fibres you will unavoidably take in ; proceed in this manner till you come to the place where you first fastened, and where an end of the silk is : then clip off those fibres of the hackle which you held between your finger and thumb, close to the stem, and hold the stem close to the hook, afterwards take the silk in your right-hand, and whip the stem very fast to the hook : then make up a loop, and fasten it tight. Take your pen-knife, and if that part of the stem next the shank of the hook is as long as the part of the hook which is bare, pare it fine, wax your silk, and bind it neatly on the remaining bare part of the hook ; then fasten the silk tight, and spread some shoemaker's-wax very lightly on your last binding : after that, clip off the ends of the remaining silk,

both at the shank and the bend of hook, and all fibres that start or stand ill-conditioned, and the whole is completed.

This is called the palmer-fly or plain hackle, and may, instead of the ostrich's-feather above-mentioned, be dubbed with black spaniel's-fur. There are three more palmers, which are all to be made in the same manner as I have laid down, only with different articles, which are as follows:

Great Palmer, or Hackle.

Dubbed the same as the plain hackle with the strands of an ostrich's-feather, or a black spaniel's-fur, and warped with red peacock's-hackle, untrimmed, that is, leaving the whole length of the hackle staring out (for sometimes the fibres of the hackle are to be shortened all over, sometimes barbed only a little, and sometimes close underneath) leaving the whole length of fibres on the top, or back of the fly, which makes it swim better, and on a whirling round water, kills great fish. Your hook for this palmer, No. 5.

Golden Palmer, or Hackle.

The same dubbing, ribbed with gold-twist and a red-hackle over all.

Silver Hackle.

Made with black body also, silver-twist over that, and a red-hackle over all.

The variation that is to be observed in making the gold and silver palmers is this, that when you whip the end of the hackle to the bend of the hook, you must also do the same to the gold or silver twist, and first wind either of them on the dubbing, observing that they lie flat on it, and then fasten off; afterwards proceed with the hackle as directed: or you may wind the hackle on the dubbing first, and rib the body with either of the twists afterwards.

These are the standard hackles in fly-fishing, and are taken any month in the year, from nine to eleven in the morning, and from one to three in the evening, and upon any water; though you must have different sizes of them, and dubbed with different colours, that you may always be able to suit either a clear or dark water, or a bright and cloudy atmosphere; observing, that small light-coloured flies are for clear waters and skies, and the largest for dark and cloudy ones.

These palmers (as I said before), being taken every month in the year, when I come to treat of the flies proper for each month, I shall not take any notice again of the four which I have set down, for that would be totally unnecessary; but the others that deviate in their size and dubbing from the general rule, will be fully expressed.

The angler should always try the palmers first, when he fishes in a river that he is unaccustomed to; and even in that which he constantly uses, unless he knows what fly is on the water, and they should never be changed till he does. To come to the

true knowledge of this, he must observe an old rule laid down for that purpose ; and as it is poetically described by Mr. Gay, I shall give it him in that dress.

“ Mark well the various seasons of the year,
How the succeeding insect race appear,
In this revolving moon one colour reigns,
Which in the next the fickle trout disdains.
Oft have I seen a skilful angler try
The various colours of the treach'rous fly ;
When he with fruitless pain hath skim'd the brook,
And the coy fish rejects the skipping hook,
He shakes the boughs, that on the margin grow,
Which o'er the stream a weaving forest throw ;
When if an insect fall (his certain guide)
He gently takes him from the whirling tide :
Examines well his form with curious eyes,
His gaudy vest, his wings, his horns, and size ;
Then round his hook the chosen fur he winds,
And on the back a speckled feather binds ;
So just the colours shine through ev'ry part,
That Nature seems to live again in art.”

*The best Method to Make an Artificial Fly,
not a Palmer.*

First hold your hook fast betwixt the fore-finger and thumb of your left-hand, with the back of the shank upwards, and the point towards your right-hand ; then take a strong small silk, of the colour most predominant in the fly you intend to make ; wax it well with wax of the same colour, and draw it between your finger and thumb to the end of the

shank ; then whip it twice or thrice about the bare hook, which prevents its slipping, and the shank of the hook from cutting the gut. This being done, take your gut and draw it likewise between your finger and thumb, holding the hook so fast as only to suffer it to pass by, till the end of the gut is near the middle of the shank of the hook, or the inside of it : then whip the silk twice or thrice about both gut and hook, as hard as the strength of the silk will permit ; after that take the wings, which, before you began to make your fly, you had stripped off the stem, for its wings, and proportional to it, and which lie with your other materials by you (as they always should before you begin), and place that side downwards which grew uppermost before, upon the back of the hook, leaving so much only, to serve for the length of the wings of the point of the plume, laying it reversed from the end of the shank upwards, then whip your silk twice or thrice about the root-end of the feather, gut, and hook. This being done, clip off the root-end of the feather close by the arming, and then whip the silk fast and firm about the hook and gut, till you come to the bend of it : and then, if the gut goes beyond the bend of the hook, cut it off, and make all fast. Take then the dubbing which is to make the body of your fly, as much as you think will do ; and holding it lightly with your hook, between the finger and thumb of your left-hand, take the silk with your right-hand, and twisting it between the finger and thumb of that hand, the dubbing will spin itself about the silk, which, when

it has done, whip it about the armed hook, till you come to the setting on of the wings. Afterwards take the feather for the wings, divide it into two equal parts, and turn them back towards the bend of the hook, the one on the one side, the other on the other side of the shank, holding them fast in that posture, between the fore-finger and thumb of your left-hand. Then warp them so down, as to stand, and slope towards the bend of the hook; and having warped up to the end of the shank, hold the fly fast between the finger and thumb of your left-hand, and then take the silk between those of your right, and where the warping ends, and pinch and nip it with your thumb-nail against your finger, and strip away the remainder of your dubbing from the silk, which wax again, and then with the silk which is newly waxed and bare, whip it once or twice about, make the wings stand properly, then fasten and cut it off; after which, with the point of a needle, raise up the dubbing gently from the warp, twitch off the superfluous hairs of your dubbing, leave the wings of an equal length (or your fly will never swim true), and the whole is completed.

In this manner you are to make the May-fly or green-drake, and all other flies that are not palmers. The materials to make the green-drake are the following: Your hook must be No. 5, and you must have the white-grey feathers of a mallard for the wings, dyed yellow; the dubbing camel's-hair, bright bear's-hair, yellow-camlet, and the soft down that is combed from the bristles of a hog, well-mixed

together ; the body must be long, and ribbed about with green-silk, or rather yellow, waxed with green-wax, and three long hairs for his tail, from those off a sable's. (*See Frontispiece, No. 2*).

Or, the May-fly may be dubbed after this method. The body of seal's-fur, or yellow-mohair, a little fox-cub-down, and hog's-down, or light-brown from a Turkey-carpet, mixed together, warped with green and yellow, pale yellow, or red-cock's-hackle under the wings, which are to be the same as in the other method of dubbing it.

As I shall not mention the green-drake when I come to describe other flies taken in the month of May, I will here give you every particular concerning it. He comes on the water the twentieth of that month, and is taken all day long, but best from two to four in the evening, and kills most fish from the end of May to the ninth of June.

How to Dye the Mallard's Feather Yellow.

Take the root of a Barbary tree, and shave it, and put to it *woody viss*, with as much alum as a walnut, and boil your feathers in it with rain water, and they will be of a fine yellow ; or get a little *weld* and *rocou*, and boil your feathers with them, and it will answer the same purpose.

CHAP. III.—*The names, and the best Manner of dubbing the different Artificial Flies, which are generally known and will take Fish on any Water, from the beginning of March to the end of September.*

I SHALL begin fly-fishing with the month of March, that being soon enough to throw a fly on the water. The inclemency of the weather, before that time, and sometimes afterwards renders the attempt not only unpleasant, but fruitless, to endeavour to take fish with the fly; and the risk that a man runs of impairing his health, forms an objection more strongly against it.

MARCH

THE PALMERS.

- | | |
|-----------------------------------|----------------------------------|
| 1. <i>The Dark Brown.</i> | 5. <i>The Blue Dun. (Front.</i> |
| 2. <i>The Green Whirling Dun.</i> | <i>No. 3.)</i> |
| 3. <i>The Early Bright Brown.</i> | 6. <i>The Little Black Gnat.</i> |
| 4. <i>The Thorn, or Hawthorn</i> | <i>(Front. No. 4.)</i> |
| <i>Tree Fly. (Front. No.</i> | 7. <i>The late Bright Brown.</i> |
| <i>10.)</i> | |

1. Dubbed with the brown hair off the shank of a brinded cow, and the grey feather of a drake for wings.

2. Dubbed with the fur from the bottom of a squirrel's tail, and the wings of the grey feather of a drake. Or, dubbed with squirrel's fur, mixed with about a sixth part of fine hog's down, the wings of a pale orange colour, taken from the quill feather off a ruddy hen, the head to be fastened with ash coloured silk, and a red unbarbed cock's hackle may be warped under the wings, and a turn or two lower towards his tail.

This is a very killing fly, and is taken best late in the evening of a blustering warm day.

3. Dubbed with the brown hair off a spaniel, taken from behind the ear, or with that off a red cow's flank; the wings, the gray feather off a wild drake.

4. Dubbed with seal's fur, dyed a perfect black, mixed with a little *Isabella*-coloured mohair, the body made small, and the wings off a bright mallard's feather. A killing fly.

5. Dubbed with the down combed from the neck of a black greyhound, or the roots of a fox-cub's tail, mixed with a little blue violet worsted, upon a hook, the size No. 9, the wings off the pale part of a starling's feather.

This fly is a killing fly, and is taken from eight to eleven, and from one to three.

6. Dubbed with black mohair, upon a hook the size No. 9, and the wings the lightest part off a starling's feather.

7. Dubbed with the hair off a cow, or calf's hide, which has been dressed in a skinner's lime-pit; if you hold it between your eyes and the sun, it will appear

of a bright gold, or amber colour; the wings off a feather of a brown hen.

APRIL.

PALMERS.

- | | |
|------------------------------------|-----------------------------------|
| 1. <i>The Dark Brown.</i> | 4. <i>The Yellow Dun.</i> |
| 2. <i>The Violet Fly.</i> | 5. <i>The Horse-flesh Fly.</i> |
| 3. <i>The Little Whirling Dun.</i> | 6. <i>The Small Bright Brown.</i> |

1. Dubbed on a small hook, No. 8 or 9, with brown seal's fur, or with brown spaniel's fur, that looks ruddy, by being exposed to the weather, mixed with a little violet camlet; warp with yellow silk, and the wings off a grey feather of a mallard. Kills best from from eight to eleven.

2. Dubbed with dark violet stuff, and a little dun bear's hair mixed with it; the wings off the gray feather of a mallard.

Kills very well from the sixth to the tenth of this month.

3. Dubbed with fox-cub down, ash-coloured at the roots, next the skin; ribbed about with yellow silk, the wings of a pale grey feather of a mallard. Or, dubbed with the same down, and a little ruddy brown mixed, warped with grey, or ruddy silk, a red hackle under the wings, which must be made from the feather of a land-rail, or ruddy brown chicken, which is better.

This fly comes on the water the twelfth of this month, and is taken in the middle of the day, and

all the month through, and in blustering weather to the end of June.

4. Dubbed with camel's hair, and marten's yellow fur, mixed together; or with a small quantity of pale yellow crewel, mixed with fox-cub-down from the tail, warped with yellow silk; and the wings of a pale starling's feather.

This fly is taken from eight to eleven, and from two to four.

5. Dubbed with blue mohair, and with pink and red-colour *tammy* mixed, a brown head and light coloured wings.

This fly is taken all the month two hours before sun-set till twilight.

6. Dubbed with spaniel's fur, the wings the lightest part off a starling's feather.

Taken very well in a bright day and clear water.

MAY.

PALMERS.

The May-Fly.

- | | |
|---------------------------------------|-------------------------------------|
| 1. <i>The Dun Cut</i> (Front. No. 5.) | 4. <i>The Little yellow May-Fly</i> |
| 2. <i>The Stone Fly.</i> | 5. <i>The Grey Drake.</i> |
| 3. <i>The Black May-Fly.</i> | 6. <i>The Camlet-Fly.</i> |
| | 7. <i>The Cow-Dung Fly.</i> |

1. Dubbed with bear's hair, of a brownish colour, with a little blue and yellow mixed with it; the

wings of a brown hen, and two horns at the head from the hairs of a squirrel's tail. Or, dubbed with bear's-cub fur, a little yellow and green crewel mixed with it, warped with yellow, or green wings of a land-rail.

A great killer in the evening of a showery day.

2. Dubbed with dun bear's hair, mixed with a little brown and yellow camlet, so placed that the fly may be more yellow on belly and towards the tail, than any where else; place two or three hairs of a black cat's beard on the top of the hook, in the arming it, in such a manner that they may be turned up when you warp on the dubbing and stand almost upright, and start from the other, rib the body with yellow silk, and make the wings very large off the dark grey feathers of a mallard. The hook, No. 3.

This is a very great killer, and comes on the water about the middle of April, and continues till the end of June; it is generally used in swift streams, but if there is a good wind stirring it will be taken in the deeps; it is taken but indifferently in the middle of the day, but excellently late and early.

3. Dubbed with the strands off a black ostrich's feather, ribbed with silver twist, and a black cock's hackle over all.

A good killer, but not to be compared with the green-drake or stone-fly.

4. Dubbed with yellow camlet, or yellow marten's fur, the wings off a mallard's feather dyed yellow

This fly is to be made very small, but exactly in shape of the drake.

5. Dubbed with whitish hog's-down, mixed with black-spaniel's-fur, ribbed with black-silk: black-cat's-beard for the whiskers of the tail, and the wings off the black-grey feather of a mallard. Or, dubbed with white ostrich's-feather: the end of the body, towards the tail, off peacock's-herl, warping of ash-colour, with silver-twist, and black-hackle, and the wings a dark-grey feather of a mallard.

A very killing fly, especially towards an evening, when the fishes are glutted with the green-drake.

6. Dubbed with dark-brown shining camlet, ribbed over with very small green-silk, and the wings off the double-grey feather of a mallard.

It will kill small fishes, and continues till the end of June.

7. Dubbed with light-brown and yellow mixed or dirty lemon-coloured mohair, with the same coloured hackle under the wings, which may be either made of the feather off a land-rail, or a dark-grey feather of a mallard.

The size of the hook, No. 7.

This fly is used in cold windy days.

JUNE.

THE PALMERS.

- | | |
|----------------------------------|----------------------------------|
| 1. <i>The Ant-Fly.</i> (See | 4. <i>The Brown Palmer.</i> |
| Front. No. 6.) | 5. <i>The Great Red Spinner.</i> |
| 2. <i>Purple Gold Palmer.</i> | (Front. No. 7.) |
| 3. <i>The Little Black Gnat.</i> | 6. <i>The Small Red Spinner.</i> |
| (Front. No. 4.) | |

1. Dubbed with brown and red camlet mixed ; the wings the pale part off a starling's feather.

2. Dubbed with purple-mohair, ribbed with gold-twist, and red-cock's-hackle over all.

3. Dubbed with the black strands off an ostrich's-feather, upon a hook the size No. 9, and the wings off the lightest part of a starling's-feather.

A great killer after a shower of rain, especially in an evening.

4. Dubbed with light-brown seal's-hair warped with ash-coloured silk, and a red-hackle over all.

5. Dubbed with seal's-fur dyed red, and brown-bear's-hair mixed together, but there must be bear's-hair sufficient to make the body appear of a dullish red, ribbed with gold-twist, the wings off a starling's feather ; and red-cock's-hackle over the dubbing. The hook, No. 7.

This fly kills very well till the latter end of August, from six o'clock till twilight, upon a dark-coloured water.

6. Dubbed with the yellow of a spaniel, taken from behind the ear, ribbed with gold-twist, a red-hackle over all, and the wings off a starling's feather.

The hook, No. 8 or 9.

This fly kills exactly at the same time the other spinner does, but when the water is very clear.

JULY.

THE PALMERS.

- | | |
|-----------------------------------|------------------------------------|
| 1. <i>The Badger Fly.</i> | 4. <i>The Black Palmer.</i> |
| 2. <i>The Orange Fly. (Front.</i> | 5. <i>The Black Silver Palmer.</i> |
| <i>No. 9.)</i> | 6. <i>The July Dun.</i> |
| 3. <i>The Wasp Fly. (Front.</i> | |
| <i>No. 8.)</i> | |

1. Dubbed with the soft brown-fur off a badger's skin, warped with red-silk, the wings off the dark-grey feather of a mallard ; the head must be red.

This fly is an excellent killer, and in some rivers is taken in March and April.

2. Dubbed with orange-coloured wool ; the wings off the feather of a black-bird's-wing. Or, dubbed with raw orange-silk, warped with silk of the same colour, ribbed with gold-twist, and a black or red-hackle over all.

This fly is taken in June, when the May-fly is

over, in hot gloomy weather, and till the end of this month.

3. Dubbed with brown-bear's-hair, or the fur off a black-cat's-tail ; ribbed with yellow silk ; and the wings off the pale feather of a stare's wing.

4. Dubbed with the herl off a copper-coloured peacock's-feather, with a black-cock's-hackle over it.

5. Dubbed the same as the black-palmer ; ribbed with silver-twist and black-hackle over all.

6. Dubbed with the down off a water-mouse, mixed with blueish dyed seal's-fur ; or, dubbed with the fur off a mole, mixed with a little marten's-fur ; warped with ash-coloured silk ; the wings off the feather of a blue-pigeon's wing.

The size of the hook, No. 9.

A good killer.

AUGUST.

THE PALMERS.

- | | |
|-----------------------------|--------------------------------|
| 1. <i>The Late Ant Fly.</i> | 4. <i>The Hearth Fly</i> |
| 2. <i>The Fern Fly.</i> | 5. <i>The Pale Blue.</i> |
| 3. <i>The White Palmer.</i> | 6. <i>The Harry Long Legs.</i> |

1. Dubbed with the hair off a cow that is of a blackish-brown ; warp some red in for the tag of his tail, the wings off the feather of a brown-hen.

An excellent killer.

2. Dubbed with the fur off a hare's-neck of a fern-colour : the wings off a darkish-grey feather off a mallard's.

3. Dubbed with the white herl off a peacock's-feather, and a white-hackle over all.

4. Dubbed with the wool off an aged black-ewe, mixed with some grey-colt's hair ; the wings off those of a starling's.

5. Dubbed with very light-blue fur, mixed with a little yellow marten's-fur, and a blue-hackle over all, the wings off the feather of a blue-pigeon. The hook, No. 3.

A very killing fly from ten in the morning till three in the evening.

6. Dubbed with darkish bear's-hair, mixed with a little blue-wool, and a brown-hackle over all. Or, dubbed with lightish bear's-hair, mixed with a few hairs of light-blue mohair, and a little fox-cub down, warped with light-grey or pale-blue silk, and a dunnish-hackle over all ; the head made large. The hook, No. 5.

Taken chiefly in a cloudy windy day.

SEPTEMBER.

THE PALMERS.

- | | | |
|-------------------------------|--|--------------------------------|
| 1. <i>The Peacock Hackle.</i> | | 3. <i>The Late Badger.</i> |
| 2. <i>The Camel Brown.</i> | | 4. <i>The September's Dun.</i> |

1. Dubbed with peacock's-ruddy-herl ; warped with green-silk, and a red-cock's-hackle over all.

2. Dubbed with the hair pulled out of the lime of an old wall ; warped with red-silk, and the wings off the dark-grey feather of a mallard.

3. Dubbed with the fur off a black-badger's-skin, mixed with the softest yellow-down of a sanded-hog, and the wings off the feather of a dark-grey mallard.

4. Dubbed with the down off a mouse ; warped with sad ash-coloured silk ; and the wings off the dark-coloured feather of a starling.

The hook, No. 9.

I have given the reader forty-seven of the best flies used in fly-fishing, and what are generally known ; with the best methods of dubbing them ; to which, if he pays attention, and makes his exceptions with judgment, he may in time become an excellent fly-fisher.

*A Selection from the foregoing List of Flies
that will kill Fish in any part of England
and Wales, particularly Trout.*

THE PALMERS.

Great Dun.

Dark Brown.

Early Bright Brown.

Late Ditto.

Black Gnat.

Yellow Dun.

Great Whirling Dun.

Little ditto.

Dun Cut.

May Fly.

Grey Drake.

Camlet Fly.

Cow Dung Fly.

Little Ant Fly.

Badger Fly.

Fern Fly.

Stone Fly.

N. B. There are two salmon-flies, which are the principal ones, called the dragon and king's-fisher, about two inches long, which may be made according to fancy, but of the most gaudy feathers there are, especially the peacock's, for they will rise at any thing gaudy ; and, where they are plentiful, at trout-flies. *

There are likewise two moths which I have omitted, great killers about twilight in a serene

* For a peacock's-feather salmon-fly ; and a silver-pheasant salmon-fly, see Frontispiece, No. 11, 12.

evening ; and the humble-bee, a famous chub-killer, any time of the day. They are dubbed in the following manner :

The *brown-moth*—the wings off the feather of a brown-owl ; dubbed with light-mohair, with a dark grizzle cock's-hackle for the legs ; and a red-head.

The *white-moth*—dubbed with the white strands of an ostrich's-feather ; wings off the feather of a white pigeon's-wing : a white-hackle for the legs, and a black head.

The hooks for both, No. 2.

The *humble-bee*—dubbed with black-spaniel's-fur ; a black-cock's-hackle over that ; the tag of the tail to be of a deep orange-colour ; and the wings off the feather of a crow's-wing.

The hook, No. 2.

“ When artful flies the angler wou'd prepare,
This task of all deserves his utmost care :
Nor verse nor prose can ever teach him well
What masters only know, and practice tell.
Yet thus at large I venture to support,
Nature best follow'd best secures the sport.
Of flies the kinds, their seasons, and their breed,
Their shapes, their hue, with nice observance heed :
Which most the trout admires, and where obtain'd
Experience best will teach you, or some friend :
For several kinds must ev'ry month supply,
So great's his passion for variety :
Nay, if new species on the streams you find,
Try—you'll acknowledge fortune amply kind.”

MOSES BROWNE.

CHAP. IV.

THE list of flies which I have given the angler, he may depend are the standard for artificial fly-fishing; but as I am willing to give him as much scope as possible, to enable him to become an adept in this pleasant and ingenious recreation, I here present him with a second list, which he must make use of as his experience in artificial-fly-fishing increases; and I dare affirm, that if he makes a judicious application of this and the former list, and observes the rules laid down for the weather, proper for this sport, he will never go home with an empty pannier.

The Red Fly.

Comes on about the middle of February, and continues till the end of March: its wings are made artificially, of a dark drake's feather; the body of the red part of squirrel's fur, with the red hackle of a cock, wrapped twice or thrice under the but of the wing; has four wings, and generally flutters upon the surface of the water, which tempts the fishes, and makes them take it the more eager. The size of the hook, No. 6.

The Blue Dun Fly,

Comes on the beginning of March, and continues to the middle of April; its wings are made of a

feather out of the starling's wing, or the blue feathers that grow under the wing of a duck widgeon; the body is made of the blue fur off a fox, or the blue part of a squirrel's fur, mixed with a little yellow mohair, and a fine blue cock's hackle wrapped over the body, in imitation of the legs: as it swims down the water, its wings stand upright on its back; its tail forked, and of the same colour of its wings. It appears on the water about ten o'clock in the forenoon; and continues till about three in the afternoon; but the principal time of the day is from twelve till two; the flies then come down in great quantities, and are always more plentiful in dark, cold, gloomy days, than in bright sun-shiny weather. *Your morning's fishing, till the flies come on, should be with the worm or minnow.* The size of the hook this fly is made on, is No. 7; but if the water is very low and fine, No. 8.

The Brown Fly, or Dun Drake,

Comes on about the middle of March, and continues till the latter end of April; its wings are made off the feather of the pheasant's wing which is full of fine shade, and exactly resembles the wing of the fly; the body is made of the bright part of a hare's fur, mixed with a little of the red part of squirrel's fur ribbed with yellow silk, and a partridge's hackle wrapt over twice or thrice under the but of the wing: as it swims down the water, its wings stand upright upon its back, its tail is forked, and of the

colour of its wing: it comes upon the water about eleven o'clock, and continues on till two, appearing on the water in shoals, or great quantities; in dark gloomy days, at the approach of the least gleam of sun, it is amazing to see, in a moment's time, the surface of the water almost covered with ten thousands of these pretty little flying insects, and the fishes rising and sporting at them, insomuch that you would think the whole river was alive; it is a pleasing sight to the angler, and affords him great diversion; in this manner they appear on the water every successive day, till the end of their duration. The blue dun, and the brown, are both on at the same time; the blues are most plentiful in cold and dark days, and the browns in warm and gloomy days, though I have often seen blues, browns, and granams, on at the same time, when they have refused the other two sorts, and have taken the browns only: there cannot be too much said in commendation of this fly, both for its duration, and the sport it affords the angler: The size of the hook it is made on, is No. 6.

The Granam Fly, or Green-Tail,

Comes on about the beginning of April, if the weather is warm, being a very tender fly, and unable to endure the cold. When they first appear on the water, they do so in great quantities: in bright mornings, you may begin to fish with them from six o'clock in the morning till eleven; then you will

find the browns come on, which you must use, as the fish will not touch the granams as long as the browns continue ; about five o'clock in the evening you may use the granams again with success, the browns having then totally disappeared for that day. The granam-fly is a four-winged fly ; as it swims down the water its wings lie flat on its back, it has a small bunch of eggs, of a green colour, which gives it the name of the *green-tail fly* ; as soon as it lights on the water, it drops its eggs ; it is of short duration, not lasting above a week, and then totally disappears for that year. The wings are made from a feather out of the wing of a partridge or pheasant, which is shaded like the wing of a fly ; the body is made of the fur from a hare's face, or ear, and a grizzled hackle of a cock wrapt under the but of the wings. The hook, No. 8.

The Spider Fly,

Comes on about the twentieth of April, if the weather is warm, and continues on about a fortnight : they are bred in beds of gravel by the water-side, where you may find them in bunches engendering, to prepare for their production the next year : in cold and stormy days they hide themselves in the gravel, not being able to endure cold. You may fish with it from sun-rise till sun-set ; being a very killing fly, too much cannot be said in its praise. The wings are made from a woodcock's feather, out of the but of the wing ; the body of lead-coloured silk, with a black cock's hackle wrapt twice or thrice

under the wings. *This fly cannot be made too fine.*
The hook, No. 8 or 9.

The Black Caterpillar,

Comes on about the beginning of May, and continues on about a fortnight, and is to be fished with after hot sun-shiny mornings; if winds and clouds appear, they then grow weak for want of the sun, and fall upon the waters in great quantities. The wings are made from a feather out of a jay's wing, the body of an ostrich's feather, which is preferable to the plover's and fine black cock's hackle wrapt over the body. *It is a very killing fly in small brooks.*
The hook, No. 7.

The Little Iron-Blue Fly,

Comes on about the seventh of May, and continues on till the middle of June. In cold stormy days they come down the waters in great quantities, but in warm days there are but few to be seen. As it swims down the water, its wings stand upright on its back; its tail is forked, and of the colour of its wing: it is a neat curious fly, and cannot be made too fine; it is to be fished with from about eleven o'clock in the forenoon till three in the afternoon. When these flies are on, the fishes refuse every other sort, and take these only, every sort of fish being fond of them. The wings are made from a cormorant's feather that grows under the wing, or off the feather of a dark-blue hen, that grows on the

body, under the wings ; the body is made of water-rat's fur, ribbed with yellow silk, and a sooty blue hackle of a cock, wrapt over the body. The hook No. 8 or 9.

The Yellow Sally Fly,

Comes on about the twentieth of May, and continues on till about the tenth or twelfth of June. It is a four-winged fly ; as it swims down the water its wings lie flat on its back. The wings are made with a yellow cock's hackle, and the body of marten's fur, taken from the spots under the jaws, which is a fine yellow. *It is one of those flies that prepare the fish to look for the May-fly, or Green-drake.* The hook, No. 7.

The Oak, Ash, Woodcock, Cannon, or Down-hill Fly,

Comes on about the sixteenth of May, and continues on till about a week in June : it is to be found on the butts of trees, with its head always downwards, which gives it the name of the down-hill-fly.* It is bred in oak-apples, and is the best of all flies for bobbing at the bush in the natural way, and a good fly for the dib-line, when made artificially. The wings are made from a feather out of the wing of a partridge or woodcock, the body with

* *Vide* description of this fly, part 1st, under Natural-Fly Fishing.

a bittern's feather, and the head with a little of the brown part of hare's fur. The hook, No. 7.

N. B. Some dub it with black wool and Isabella-coloured mohair, and bright brownish bear's hair, warped on with yellow silk, but the head of an ash colour: others dub it with an orange tawney and black ground; and others with blackish wool and gold twist; the wings off the brown part of a mallard's feather.

The Shorn Fly,

Comes on about the same time as the cannon-fly, and continues on till the latter end of July. They are generally found in mowing grass; it is of the caterpillar kind, has dusky wings of a dark brown colour, with fine clear blue wings under them, which it makes use of in its flight: it is in greatest perfection in June: and for the time that it continues on the water, is a most excellent killer in rivers or brooks. There are three sorts of them: the one I have described; another with a dull red wing; and a third with a dark blue wing—all of which the fish take very well; but the preference must be given to the red sort: it is to be fished with any time of the day, from sun-rise to sun-set. The wings are made of a red cock's hackle, with a black list up the middle; the body with a peacock's herl. The hook, No. 6, if for a river; but if for a dead, heavy, running brook, the fly must be made larger, as on No. 4 or 5.

The Orf Fly,

Comes on the latter end of May, and continues on till the latter end of June. It is a four-winged fly, generally flutters along the surface of the water, and is what fishes are remarkably fond of; you may fish for it successfully after the May-fly is gone, from four o'clock in the morning till about seven in the evening, at which time the sky-blue comes on, then change it for the sky-blue. The wings of the orf-fly are made with a dark grizzle cock's hackle, and the body of peacock's herl, worked with dark red silk. The hook, No. 6.

The Sky-Coloured Blue,

Comes on about the same time as the orf-fly, and continues on till the middle of July. It is a neat, curious, and beautiful fly; its wings are transparent, stand upright upon its back, and are of a fine blue colour, its body is of a pale yellow, its tail forked, and the colour of its wings; it is a fly the fishes take extremely well from seven o'clock in the evening till sun-set. The wings are made from the light blue feather of a hen; the body is made with pale yellow mohair, mixed with light blue fur, and ribbed with a fine cock's hackle, dyed yellow. The hook, No. 8.

The Cadiss Fly,

Comes on about the tenth of June; it is a large

four-winged fly, of a buff colour, and its body the same colour as its wings: it continues on the water till about the middle of July; it is bred from the cod-bait, a curious little insect: while in the state of a grub it is greatly to be admired, the outside husk that it lives in, being curiously wrought with gravel or sand: this fly is taken best at the clearing of the water, though I think him a fly worth the least notice of any in the catalogue, there being many sorts far preferable to it. The wings are made from a feather taken from a buff-coloured hen; the body is made of buff-coloured mohair, and the legs of a pale yellow hackle. The hook, No. 6. (*For representation of the fly see Front. No. 13*)

The Blue Gnat,

Comes on the water about the same time as the spinners (*vide* List, the first under June) and continues on about a fortnight: if the water is low and fine the fishes take them very well, and as long as they remain on the water. The wings of this gnat are made of a small pale blue cock's hackle, and the body with light blue fur, mixed with a little yellow mohair. The hook, No. 8, or 9.

The Large Red Ant-Fly,

Comes on about the middle of June, if hot and sultry weather, and continues on until about the 15th or 16th of July, appearing mostly in hot, close gloomy days: it is to be fished with from about eleven o'clock in the forenoon, till about six in the

evening; then make use of the *evening flies* described before. The ant-flies, when in perfection, are great killers, and all sorts of fishes that rise at flies, are very fond of them; and you may take fish with them in dead heavy waters, as well as in streams. The wings of this fly are made from a feather out of a stare's wing, and the body of peacock's herl, made pretty large at the tail, and fine towards the wing, with a fine ginger-coloured cock's hackle wrapt twice or thrice under the but of the wings. The hook, No. 8.

The Large Black Ant-Fly,

Comes on at the same time with the red, and is to be fished with at the same time, and after the same manner. The wings of this fly are made with the lightest sky-blue feather you can get, and with the greatest gloss; but it is difficult to find any that can come up to the glossiness of the natural wings, except the thistle, which makes them the best of any thing I know of, but is not lasting; the body is made with a black ostrich's feather, and a black cock's hackle wrapt under the but of the wings; it is to be made in the same form as the red one. The hook, No. 8.

The Welshman's Button, or Hazel-Fly,

Comes on about the latter end of July, and continues on about nine days; it is in form like a round button, from which it derives its name: it has four

wings, the uppermost husky and hard, the undermost of a fine blue colour, soft and transparent; it is to be found on hazel-trees, or fern: it is an excellent fly for bobbing at the bush, or dub line; but is rather difficult to make, on account of its shape and form; the wings are made from the red feather that grows upon the rump or tail of a partridge; the body is made with a peacock's herl, and an ostrich's feather mixed, and the legs of a fine black cock's hackle. The hook, No. 7.

The Little Red and Black Ant-Flies,

Come on about the tenth or twelfth of August, are to be seen in warm gloomy days, till the latter end of September: to be fished with from about twelve o'clock, till four in the evening, and are to be made in the same form as the large ones, and with the same materials, but very small. The hook, No. 9.

The Little Whirling Blue,

Comes on about the tenth or twelfth of August, and continues on about three weeks: as it swims down the water, its wings stand upright on its back; it has a forked tail the colour of its wings; it is to be fished with from eleven o'clock in the forenoon, till three in the afternoon. The wings are made from a feather out of the wings of a starling; the body is made with spaniel's fur, mixed with a little yellow, and a fine red hackle over the body. The hook, No. 8.

The Little Pale Blue,

Comes on about the same time as the whirling blue, and continues on till about the latter end of September; as it swims down the water, its wings stand upright on its back; it has a forked tail, of the colour of its wings; it is a neat, curious, little fly, and what the graylings are very fond of: it is to be fished with from about ten o'clock in the morning, till about three in the afternoon, and generally affords the angler great diversion. The wings are made from a feather off the sea-swallow: the body is made of the lightest blue fur you can get, mixed with a very little yellow mohair, with a fine pale blue hackle wrapt over the body. The hook, No. 8.

The Willow Fly,

Comes on about the beginning of September, and continues till the latter end of October: it is a four-winged fly, and generally flutters upon the surface of the water: it is to be fished with in cold stormy days, being then most plentiful on the water; but in warm gloomy days make use of the pale-blue. The wings are made of a blue grizzled cock's hackle, and the body of the blue part of squirrel's fur, mixed with a little yellow mohair. The hook, No. 7.

The three last-mentioned flies conclude the season for *fly-fishing*. From the middle of May till

August, you will find great variety of flies and gnats upon the water every day, so that you must observe it as a general rule to fish with the first fly that comes on in the morning; that fly being the first which is on the water on the day that is first mentioned in every month, and then you will see the other flies and gnats, coming down every day in regular succession, every succeeding day till August. The great number of flies and insects that are on the water, all the hot summer's months, and the great variety of food that fishes have, both at top and bottom, makes them very nice, and more difficult to be taken, than in the spring or in the autumn; the great number of flies and insects which are on the water all the summer months, totally disappear about the middle of August, so that your diversion is as certain with the *three autumnal flies*, viz. the Little Whirling Blue, the Pale Blue, and the Willow-fly, as with the *three spring flies*, which are the Red-fly, the Blue Dun, and the Brown. In these two seasons of the year, if the weather is favourable, and the water in order, you will find your sport more certain and regular, than in the hotter months. This last list of flies may be deemed the standard of *artificial-fly-fishing*; they are the ingenious Bowlker's, of Ludlow in Shropshire. For their excellency they are not to be equalled. They will kill fish in any county of England and Wales, and are what I call *the angler's treasure*.

CHAP. V.—*Rules for Artificial-Fly-fishing.*

It is the best fishing in a river somewhat disturbed with rain, or in a cloudy day, when the waters are moved with a gentle breeze: the best winds are the south and west; and if the wind blows high, yet not so but that you may conveniently guide your tackle, the fishes will rise in the still deeps; but if there is little wind stirring, the best angling is in swift streams.

In casting your line do it always before you, and in such a manner that the fly may fall first on the water, and as little of your line with it as possible; but if the wind is high, you will then be forced to drown a good part of it, that you may keep the fly on the water. Endeavour, as much as you can to have the wind at your back, and the sun in your face; but the winding of the river will frequently render that impracticable.

When you throw your line, wave the rod in a small circumference round your head, and never make a return of it before it has had its full scope, for if you do the fly will snap off.

Even if the day is cloudy and windy, and the water thick, you must keep the fly in continual motion, otherwise the fishes will discern the deceit.

“Upon the curling surface, let it glide,
With nat’ral motion from your hand supply’d,
Against the stream now gently let it play,
Now in the rapid eddy float away.”

Let the line be twice as long as the rod, unless the river is encumbered with wood: and always stand as far off the bank as the length of your line will permit, when you cast the fly to the contrary side. But if the wind blows so that you must throw your line on the same side you are on, stand on the very brink of the river, and cast your fly at the utmost length of the rod and line, up or down the stream as the wind serves.

You must have a quick sharp eye, and active hand, to strike directly a fish rises: or else, finding the mistake, he will throw out the hook.

Small light-coloured *flies* are for clear waters and clear atmospheres; large dark-coloured *flies* for the contrary.

When, after rain, the water becomes brownish, an orange-coloured *fly* is taken greedily.

When the fish rise at the fly very often and yet do not take it, you may conclude that it is not what they like: therefore change it for the one they do.

When you see a fish rise, throw your fly over him, and draw it gently over the place where he rose; and if it is a proper fly for the season, and you cast it with a nicety, the fish is your own.

When you angle in slow-running rivers, or still places, with an artificial *fly*, cast it across the water, and let it sink a little in the water, and then draw it gently over to you again, letting the current carry it slowly down: this is the best way for slow waters; but for quick ones your fly must always swim on the

under the continual inspection of your eyes, which ought, for this kind of angling, to be as sharp as the *basilisk's*.

It is a good plan always to carry some dubbing, gut, hooks, and silk, with you, in a small pocket-book, that you may be able to imitate any fly you see the fish rise at more than others.

The lighter your flies fall on the water the better: this you will not accomplish by strength, but by practice, always raising your rod by degrees, after you have made your *cast*. A young angler should never use more than one fly on the *stretcher* at first, but when he can *throw out* pretty well, he may add to the *stretcher* one or more *droppers*, observing always to let them be one yard asunder.

I shall conclude these rules with a passage relating to *artificial-fly-fishing*, from the *Spring* of that elegant and natural descriptive poet, *Thomson*, which cannot fail to contribute not only to the amusement, but the instruction of the reader.

Soon as the first foul torrent of the brooks,
Swell'd with the vernal rains, is ebb'd away,
And, whit'ning, down their mossy tinctur'd stream
Descends the billowy foam, then is the time,
While yet the dark-brown water aids the guile,
To tempt the trout. The well-dissembled fly,
To rod fine tapering, with elastic spring,
Snatch'd from the hoary steed the floating line,
And all thy slender watery stores prepare.
But let not on thy hook the tortur'd worm,
Convulsive twist, in agonizing folds,
Which, by rapacious hunger swallowed deep,

Gives, as you tear it from the bleeding breast
Of the weak helpless uncomplaining wretch,
Harsh pain and horror to the tender hand.
When with his lively ray the potent sun
Has pierced the streams, and roused the finny race,
Then, issuing cheerful, to thy sport repair ;
Chief should the western breezes curling play,
And light o'er ether bear the shadowy clouds.
High to their fount, this day, amid the hills
And woodlands warbling round, trace up the brooks ;
Then next pursue their rocky channel'd maze
Down to the river in whose ample wave
Their little naiads love to sport at large.
Just in the dubious point, where with the pool
Is mix'd the trembling stream, or where it boils
Around the stone, or from the hollow bank
Reverted plays in undulating flow,
There throw, nice judging, the delusive fly,
And as you lead it round in artful curve,
With eye attentive mark the springing game.
Straight as above the surface of the flood
They wanton rise, or urged by hunger leap,
Then fix with gentle twitch the barbed hook :
Some lightly tossing to the grassy bank,
And to the shelving shore slow dragging some,
With various hand, proportion'd to their force.
If yet too young, and easily deceiv'd,
A worthless prey scarce bends your pliant rod,
Him, piteous of his youth, and the short space
He has enjoy'd the vital light of heav'n,
Soft disengage, and back into the stream
The speckled captive throw ; but should you lure
From his dark haunt, beneath the tangled roots
Of pendant trees, the monarch of the brook,
Behoves you then to ply your finest art :
Long time he, following cautious, scans the fly,

And oft attempts to seize it, but as oft
The dimpled water speaks his jealous fear :
At last, while haply o'er the shaded sun
Passes a cloud, he desperate takes the death
With sullen plunge : at once he darts along,
Deep struck, and runs out all the lengthen'd line,
Then seeks the farthest ooze, the sheltering weed,
The cavern'd bank, his old secure abode ;
And flies aloft, and flounces round the pool,
Indignant of the guile. With yielding hand,
That feels him still, yet to his furious course
Gives way, you, now retiring, following now
Across the stream, exhaust his idle rage,
Till, floating broad upon his breathless side,
And to his fate abandon'd, to the shore
You gaily drag your unresisting prize.

CHAP. VI.—**Of the principal Rivers in England, and particularly of the Thames.*

THE rivers in England are said by Dr. Heylin, to be three hundred and twenty-five, though others increase their number to four hundred and fifty. It would be superfluous here to treat particularly of their diversities, their situations, their distance and remoteness from each other, their nearness or vicinity to the sea, the qualities of their water, and the various species of fish they contain. Those that have a more immediate intercourse with the sea, par-

* The angler must observe, that the names of Wye, Avon, Ouse, Stone, and some others, are common to many rivers in England, as that of Dulas is to numbers in Wales.

take of its influences, and have the same vicissitudes, the same fluxes and refluxes, the same salt water, and the same sort of fish, which frequent those seas where they disembogue themselves. The mouth of rivers are too deep to be fathomed by the cordage of a line ; but more inland and farther distant from the common receptacle of waters, the rivers are most proper for the angler's diversion.

The principal rivers in England, are, the Thames, Severn, Trent, Tyne, Tweed, Medway, Tees, Dove, Isis, Tame, Willey, Avon, Lea, Trevel, Lon, Nen, Welland, Derwent, Calder Wharf, Nid, Don, Swale, Hull, Ouse, and Are. The rivers in Wales are reckoned above two hundred, the principal of which are the Dee, Wye, Conway, Tivy, Chedlayday, Cluid, Usk, Towy, Taff, and Douay. Several rivers in England run under ground and then rise again, as a branch of the Medway in Kent ; the Mole in Surry ; Hans in Staffordshire ; the little rivers Allen in Denbighshire, and Deverel in Wiltshire ; the river Recall hides itself under-ground, near Elmsley in the North-Riding of Yorkshire ; at Ashwell, in Bedfordshire, rise so many sources of springs that they soon drive a mill ; at Chedder, near Axbridge in Somersetshire, is a spring that drives twelve mills in a quarter of a mile. In the midst of the river Nen, south of Peterborough in Northamptonshire, is a deep gulf, called Medeswell, so cold, that in summer, no swimmer is able to endure it, yet is not frozen in the winter.

I shall now give the angler the names of the principal rivers in our counties.

Bedfordshire. The Ouse, navigable to Bedford, divides the county into two parts; the Ivel, Lea, and other smaller streams.

Berkshire. The Thames, Isis, Kennet, Loddon, and the Lambourne: the latter, contrary to all others is always the highest in summer, and lowest, when winter approaches.

Buckinghamshire. The Thames, Ouse, Coln, Wickam, Amersham, Isis, Tame, and Loddon.

Cambridgeshire. The Ouse, Cam, Welney, and Neve.

Cheshire. The Mersey, Dee, Weelock, Croke, Dan, Fulbrook, Wever, Goyte, Bolling, and Ringay.

Cornwall. The Tamer, Comer, Loo, Camel, Lydd, Fowey, Haile, and Liver.

Cumberland. The Eden, Aln, Jet, Petterel, Cande, Derwent, Cocker, Duddon, Leven, Esk, Wiza, and Tyne.

Derbyshire. The Derwent, Trent, Wye, Erish, Crawlock, Dove, Compton, Rother, Ibber, and Nore.

Devonshire. The Tame, Exe, Plym, Torride, Taw, Yalm, Otter, Oke, Dark, Tavy, Aven, Erme, Calme, Teigne, Ax, and Loman.

Dorsetshire. The From, Brit, Piddle, Stour, and Liddon.

Durham. The Tees, Tyne, Were, Tame, Lune, Durwent, Gaunless, and Skern.

Essex. The Thames, Black Water, Stour, Coln, Lea, Crouch, Chelmer, and Roding.

Gloucestershire. The Severn, Wye, Coln, Chein, Stroud, Isis, Avon, Fromes, Siviliate, Caron Windrush, Evondole, Leden, Lathe, Isbourne, Chilt, Badgworth, Evelm, Berkley, and Trim.

Hampshire. The Ithing, or Alre, the Tees, or Test, Anton, Avon, Stour, Wey, Loddon, and Auborn.

Herefordshire. The Wye, Lugg, Munnow, Arrow, Frome, Doir, Leddon and Tame.

Hertfordshire. The Sea, Coln, Stort, Gade, Bean, Tame, Ribb, and the New River, which supplies London with water.

Huntingdonshire. The Ouse, Nen, and Cam, with some smaller streams.

Kent. The Thames, Medway, Stour, Rother, Darent, Tun, Ravensbourne, and Wantsheim.

Lancashire. The Duddon, Crake, Leven, Winster, Lon or Lune, Wyer, Calder, Hodder, Wenning, Ribble, Douglass, Yarrow, Darent, Trevell, Roch, Alt, Tame, Medlock, and Irk.

Leicestershire. The Stour, Welland, Wreck, Avon, Anger, Swift, Seme, and the Eye.

Lincolnshire. The Humber, Trent, Witham, Welland, Ancam, Bane, Nen, Dun and Idle.

Middlesex. The Thames, Lea, Coln, Brent, and the New River.

Monmouthshire. The Severn, Monnow, Wye, Usk, Rimney, and Avon.

Norfolk. The lesser Ouse, Wesbech, the Yore, Waveney, Wensor, Thyrn, Lynn, and some lesser streams.

Northamptonshire. The Ouse, Nen, Welland, Chenvill, and the Leam.

Northumberland. The Tweed, Tyne, North and South Tyne, Alne, Wensbeck, Coquet, Bramish, Usway, Blythe, Till, East and West Alon.

Nottinghamshire. The Trent, Lyn, Ryton, Leane, Idle, Erwash, Meden, and Maun.

Oxfordshire. The Thames, Cherwell, Isis, Tame, Swere, Clin Rea, Oke, Windrush, Evanlode, and Sorbrook.

Rutland. The Gnash, Eye, Chater, and Welland.

Shropshire. The Tweed, Severn, Teem, Clun, Ony, Warren, Tern, Corve, Rea, Kemlot, and Melo.

Somersetshire. The Severn, Ivil, Avon, Ax, Car, Exe, Frome, Brent, Parret, Brue, and Tone.

Staffordshire. The Trent, Manyfold, Chernet, Lime, Penk, Stove, Tern, Dove, Boine, Sow, Blith, Team, and Smestall, with very extensive navigable canals.

Suffolk. The Stour, Bret, Lark, Little Ouse, Orwell, Deben, Butley, Alde, Waveney, and Blyth.

Surry. The Thames, Wandel, Mole, Wey, and Loddon.

Sussex. The Cockmere, Little Ouse, Rothur, Adur, Rye, and Arun.

Warwickshire. The Avon, Tame, Alne, Anker, and Cole.

Westmoreland. The Eden, Ken, Lune, Tees, Belo, Lowther, Roatha, and Emont; besides Ulles,

Broad and Horn's waters, and that extensive piece called Wynander Mere, the largest in England, being 10 miles long, and 2 broad, with several islands in it, and its bottom one continued rock.

Wiltshire. The two Avons, the Kennet, Willey, Adder, Nadder, Duril, Were, Calne, Rey, Welleborne, and the Thames, one of whose heads is in this county.

Worcestershire. The Severn, Avon, Teem, and Stour, but enjoying the benefit of some of the late constructed canals, it has, by the inland navigation, communication with the most considerable rivers in the kingdom; which navigation, including its windings, extends above 500 miles through different counties.

Yorkshire. The Humber, Ouse, Youre, Wharf, Swale, Tees, Nid, Calder, Aire, Hull, Dunderwent, Rye, Whisk, Ribble, Esk, Skelfer, Recall, Lune, Barnes, Went, Rother, Greta, Foulney, and Leven.

North Riding of Yorkshire. The Ure, Wharf, Swale, Tees, Don, Lune, Rye, Whisk, Eden, Esk, Codleach, Leven, and Recal, with the North Bank of the Derwent.

East Riding of Yorkshire. The Humber, Hull, Ouse, Derwent, and Foulness.

West Riding of Yorkshire. The Ure, Don or Dune, Went, Calder, Aire, Ribble, Wharf, Dearn, Nidd, and Hodder; with a variety of smaller streams.

PRINCIPAL RIVERS IN NORTH WALES.

Anglesey. The Menai, and Keveny,

Carnarvonshire. The Conway, and the Seint ; it has also several lakes.

Denbighshire The Cluyd, Dee, Conway, Allen, Keriog, Kelyn, and Elway.

Flintshire. The Dee, Cluyd, Elwy, and Allen ; the most remarkable places are the Dee's Mouth, the Cluyd's Mouth, and St. Winifred's Well.

Merionethshire. The Dee, Douay, Avon, and Deaunny.

Montgomeryshire. The Severn, Rayder, Turch, and Tanet, Verniew, and some smaller streams.

Principal Rivers in South Wales.

Brecknockshire. The Hodney, Wye, Usk, and the Yrvon.

Cardiganshire. The Tavy, Rhidal, and Iswith.

Caermarthenshire. The Tavy, Cathy, Towy, Brane, and Gwilly.

Glamorganshire. The Taff, Rhymmy, Ogmere, Avan, Cledaugh, and Tavy ; also a warm spring call Tave's Well, and Swansea mineral spring.

Pembrokeshire. The Clethy, Dougledye, and the Tavy, with several lesser streams.

Radnorshire. The Wye, Lug, Turn, Arrow, Somergill, Tame, and several small streams. On the Wye is a remarkable water-fall, called Rhajadi-gwy.

There is also an excellent mineral spring at the village of Llandrindod.

As the maps will give a better prospect of these than any enumeration can do, let every angler have a large one of England, or at least of the particular county where he usually angles, and therein he may with delight observe the spring head, site, distance, various passages, windings, turnings, and confluxes of each particular river, with what towns, castles, churches, gentlemen's seats, and places of note, are on or near the banks; making as he angles, remarks proper to the nature of each.

The six principal rivers are as follow:—

1. The Thames, compounded of two rivers, Tame and Isis. The Tame rises in Bucks, beyond Tame in Oxfordshire, and the latter in Cotswold-hills, near Cirencester in Gloucestershire. They join in one about Dorchester in Oxfordshire, and thence run united betwixt that county and Bucks, and between Buckinghamshire, Middlesex, and Essex, on the one side, and Surry and Kent on the other, being wedded to the Kentish Medway in the very jaws of the ocean. This river is said to feel the violence and benefit of the sea more than any other river in Europe, ebbing and flowing twice a day, more than sixty miles.

The second river is the Severn, which has its beginning in Plinlimmon-hill, in Montgomeryshire, and its end seven miles from Bristol; washing in that space the walls of Shrewsbury, Worcester,

Gloucester, and divers others places of note. It receives greater rivers, and is further navigable than the Thames, but does not equal it for the quantity and quality of its fish.

3. The Trent (so called on account of the thirty different kinds of fish which are found in it, or because it receives thirty small rivers) has its fountain in Staffordshire, and gliding through the counties of Nottingham, Lincoln, Leicester, and York, augments the turbulent current of the Humber, the most violent stream of all the isle. The Humber is not a distinct river, because it has not a spring head of its own, but is rather the mouth or *æstuarium* of divers rivers meeting together; among which, besides the Trent, are the Derwent and Ouse.

4. The Medway rises near Tunbridge, passes by Maidstone and Rochester, and discharges itself into the mouth of the Thames, by Sheerness: a river chiefly remarkable for the dock at Chatham, where ships of the first rate are built and repaired.

5. The Tweed, the north-east boundary of England, on whose banks is seated the town of Berwick.

6. The Tyne, famous for Newcastle and its inexhaustible coal-pits.

But let me return to the Thames, of which, and the rivers that fall into it, I shall treat somewhat particularly, as they are more the seat for the diversion of angling than any others. The higher an angler goes up the Thames, if within about forty miles of London, the more sport, and the greater variety of fish

he will meet with; but as few Londoners go far from home, I shall mention the best places for Thames angling from London bridge to Chelsea.*

But before I proceed any further on this subject, it will be necessary to lay down some rules which the angler must attend to.

If the air is cold and raw, the wind high, the water rough, or if the weather is wet, it is totally useless to angle in the Thames.

But when the sky is serene, the air temperate, and the water smooth, success will attend you.

The proper hours for angling are from the time that the tide is half ebb'd, to within two hours of the high water, provided the land floods do not come down.

Always pitch your boat under the wind: that is, if the wind be in south, then keep on the Surry shore; if north, on the London side.

The best place for pitching a boat to angle in the Thames at London, are about one hundred and fifty yards from York Stairs, the Savoy, Somerset-house, Dorset-stairs, Black-Friars' Stairs; the Dung-Wharf near Water-Lane, Trig Stairs, and Essex Stairs. On Surry side, Falcon Stairs; Barge Houses; Cuper's Stairs; the Wind-mill, and Lambeth.

There are very good *roach* and *dace* to be caught at Westminster bridge, if the weather is favourable

* Since this was written, the angler's sport between London and Chelsea has been much injured by the destruction of the fish, occasioned by the refuse from the coal-gas manufactories.

in the Autumn; the fifth arch on the north side is best to pitch the boat.

When you go to angle at Chelsea, on a calm fair day, the wind being in a right corner, pitch your boat almost opposite to the church, and angle in the six or seven feet water, where, as well as at Battersea Bridge, you will meet with plenty of *roach* and *dace*.

Mortlake Deeps is the next place where *roach* principally resort, when the weeds are rotten; and here good *carp* are often taken.

From the sides of the Aits opposite to Brentford, Isleworth, and Twickenham, there is good angling for *roach*, *dace*, *gudgeons*, and *perch*, and very often you will meet with *trout* and *carp*.

Teddington Banks are remarkable for good *gudgeon*, *roach*, &c.

Kingston and Hampton-Wick are famous for *barbel*, *roach*, and *dace*.

At Hampton and Sunbury there is good angling for *barbel*, *roach*, *dace*, *chub*, *gudgeon*, and *skeggars*; and from the Aits, for *trout* and large *perch*.

Walton-deeps and Shepperton-pool abound with large *barbel*, and *dace*.

At and about Windsor is a variety of all sorts of fish; but if a man be found angling in another's water, (without leave) he is fined very high by the court of that town, if he only catches a single *gudgeon*.

Of the rivers that empty themselves in the Thames, and of others which are not far from it, I shall begin with those on the north-side.

1. Ilford river, the upper part of which abounds with *roach* and *dace*, and contains some *perch*; and between Ilford and the Thames, especially about three miles from the town, there are *pike*.

2. Woodford-river is stored with *perch*, *chub*, *roach*, and *dace*.

3. Stratford-river affords the angler good diversion for *roach*, *dace*, *chub*, *perch*, &c.

4. Bow-river, has the same fishing as the Stratford-river.

5. Hackney-river, having plenty of large *barbel*, *chub*, *roach*, *dace*, *gudgeon*, *eels*, and *lampreys*. In this river the *barbel*, *eels*, and *gudgeon*, are very fine. The river Lea runs here, and the higher you go up it the greater sport you will have: The Rye-house, near Hoddesdon, is an excellent part to go for diversion.

6. Waltham-river, besides large *barbel*, *chub*, *roach*, *dace*, *gudgeon*, and *eels*, has good store of fine *pike*, and some *carp*.

7. The New-river is pretty well stored with *chub*, *roach*, *dace*, *gudgeon*, and *eels*.

8. Brentford-river was a good one formerly, but now much abused by *poachers*; but the angler may meet with some *chub*, *roach*, *dace*, and *perch*.

9. Hounslow-river, is well stored with *roach*, *dace*, *perch*, *pike*, and *gudgeon*.

The Powder-mill tail near Hounslow, is a very good place for angling.

10. Colne-river, abounding with *chub*, *roach*, *dace*, *perch*, and *pike*.

11. Uxbridge-river, excellent for its large and

fat trout; but as the water is rented, not only leave must be obtained to angle in it; but you must pay so much per pound for what you kill. Denham, near Uxbridge, is a very famous place.

Having now done with the north side, I proceed to the south of the Thames.

1. Deptford-river, now very much decayed, has but a few fish in it, as *roach*, *dace*, and *flounders*; though by chance you may meet with a *trout*.

2. Lewisham-river in which are some good *trout*, large *roach*, *chub*, *gudgeon*, *perch*, and *dace*.

3. Wandsworth-river, well-stored with *gudgeon*, *dace*, *flounders*, *perch*, *pike*, and some *carp* and *trout*, very large silver *eels* are often taken there.

4. Mitcham-river; its principal fish are *trout*.

5. Merton-river, *trout* also.

6. Carshalton-river, abounding with *trout*, and and other white fish.

7. Moulsey-river, yielding *perch*, *jack*, *roach*, *dace*, *chub*, *gudgeon*, *eels*, *flounders*, *barbel*, and *trout*.

8. Esher-river, good for *jack*, *perch*, *chub*, *roach*, *dace*, *gudgeon*, *eels*, *flounders*, *barbel*, and *trout*.

9. Cobham-river, stored with plenty of good *trout*, fat and large, as also *dace*, *perch*, *chub*, *jack*, and *gudgeon*.

10. Weybridge-river, affording good diversion for *carp*, some of which weigh eight or nine pounds; also *jack*, *roach*, *dace*, *flounders*, *pope*, large *bleak*, *barbel*, and *gudgeon*.

11. Byfleet-river, wherein are very large *pike*,

jack, and *tench*; *perch*, of eighteen inches long; good *carp*, large *flounders*, *bream*, *roach*, *dace*, *gudgeon*, *pope*, large *chub*, and *eels*.

I shall conclude this account of the Thames and the principal rivers that fall into and compose it, with the following beautiful lines of Pope:—

First the fam'd authors of his ancient name,
The winding Isis, and the fruitful Thame;
The Kennet swift, for silver eels renown'd;
The Loddon slow, with verdant alders crown'd;
Cole, whose dark streams his flow'ry islands lave,
And chalky Wey, that rolls a milky wave:
The blue transparent Vandalis appears;
The gulfy Lea his sedgy tresses rears;
And sullen Mole, that hides his diving flood;
And silent Darent, stain'd with Danish blood.

CHAP. VII.—*Prognostics of the Weather independent of the Barometer, extracted from the best Authorities.*

As it is of importance that an angler should be able to form a judgment of the change of weather, on which his sport so much depends, he should observe the following signs, that will soon become familiar to him :

Signs from Vapours.

If a white mist in an evening or night is spread over a Meadow, wherein there is a river, it will be drawn up by the next morning's sun, and the day will be bright afterwards.

Where there are high hills, and the mist which hangs over the lower lands draw towards the hills in a morning, and rolls up their sides till it covers the top, there will be no rain.

In some places, if the mist hangs upon the hills, and drags along the woods, instead of overspreading the level grounds, in a morning, it will turn to rain : therefore to judge rightly of the appearances of a fog, it is in some degree necessary to be acquainted with the nature of the country.

More Prognostics taken from Mist.

If mists rise in low grounds and soon vanish, fair weather.

If it rises up to the hill tops, rain in a day or two.

A general mist before the sun rises, near the full moon, fair weather.

Signs from the Clouds.

It is a very considerable symptom of fair weather, when the clouds decay, and dissolve themselves into air; but it is otherwise when they are collected out of it.

Against heavy rain, every cloud rises bigger than the former, and all the clouds are in a growing state.

This is most remarkable on the approach of a thunder storm, after the vapours have been copiously elevated, suspended in the sky by the heat, and are highly charged with electrical fire; small fragments of flying clouds increase and assemble together, till in a short space of time they cover the sky.

When the clouds are formed like fleeces, deep, and dense toward the middle, and very white at the edges, with the sky very bright and blue about them, they are of a frosty coldness, and will soon fall either in hail, snow, or in hasty showers of rain.

If clouds are seen to breed high in the air, in thin white trains, like locks of wool, or the tails of horses, (usually called mare's-tails) they show that the vapour, as it is collected, is irregularly spread and scattered by contrary winds above; the conse-

quence of which will soon be a wind below, and probably a rain with it.

If the clouds, as they come forward, seem to diverge from a point in the horizon, a wind may be expected from that quarter or the opposite.

When a general cloudiness covers the sky above, and there are small black fragments of clouds, like smoke, flying underneath, which some call messengers, others Noah's Ark, because they sail over the other clouds, like the ark upon the waters, rain is not far off, and it will probably be lasting.

There is no surer sign of rain than two different currents of clouds, especially if the undermost flies fast before the wind; and if two such currents appear in the hot weather of the summer, they show that a thunder storm is gathering.

Clouds like, large rocks, portend great showers.

If small clouds increase, much rain.

If large clouds decrease, fair weather.

In summer or harvest, when the wind has been south two or three days, and it grows very hot, and you see clouds rise with white tops, like great towers, as if one were on the top of another and joined together with black on the lower side, there will be thunder and rain suddenly.

If two such clouds rise, one on either hand, it is time to make haste to shelter.

Mr. Worlidge gives us the following Rules:—

“In a fair day, if the sky seems dappled with

white clouds (which is usually termed a mackerel sky) it generally predicts rain."

This is confirmed by a very ingenious gentleman, who has constantly observed, that "in dry weather, so soon as clouds appear at a great height striped like the feathers in the breast of a hawk, rain may be expected in a day or so."

"In a clear evening, certain small black clouds appearing, are undoubted signs of rain to follow: or if black or blue clouds appear near the sun, at any time of the day, or near the moon by night, rain usually follows.

"If small waterish clouds appear on the tops of hills, rain follows.

"If clouds grow, or appear suddenly, the air otherwise free from clouds, it denotes tempests at hand, especially if they appear to the south or west.

"If many clouds, like fleeces of wool, are scattered from the east, they foretel rain within three days.

When clouds settle upon the tops of mountains, they indicate hard weather.

When the tops of mountains are clear it is a sign of fair weather.

Signs from the Dew.

If the dew lies plentifully upon the grass after a fair day, another fair day may be expected to succeed it; but if after such a day there is no dew upon

the ground, and no wind stirring, it is a sign that the vapours go upwards, and that there will be an accumulation above which must terminate in rain.

Signs from the Face of the Sky.

If those vapours, which the heat of the day raises from the earth, are precipitated by the cold air of the night, then the sky is clear in the morning; but if this does not happen, and they remain still in the air, the light of the morning will be coloured as it was in the evening, and rain will be the consequence.

There is commonly either a strong dew, or a mist over the ground, between a red evening and a grey morning; but if a red morning succeeds, there is no dew.

It is a bad symptom when a lowering redness is spread too far upwards from the horizon, either in the morning or in the evening; it is succeeded either by rain or wind, and frequently both.

When such a fiery redness, together with a raggedness of the clouds, extends towards the zenith in an evening, the wind will be high from the west or south-west, attended with rain, sometimes with a flood. When the sky, in a rainy season, is tinged with sea-green colour, near the horizon, instead of blue, the rain will continue and increase: if it is of a deep dead blue, it is abundantly loaded with vapours, and the weather will be showery.

Signs from the Sun, Moon, and Stars.

When there is a haziness aloft in the air, so that the sun's light fades by degrees, and his orb looks whitish and ill-defined, it is one of the most certain signs of rain.

If the moon and stars grow dim in the night, with the like haziness in the air, and a ring or halo appears round the moon, rain will follow.

If the rays of the sun, breaking through the clouds, are visible in the air, and appear like those horns of irradiation which painters usually place upon the head of Moses, the air is sensibly filled with vapours, which reflect the rays to the sight, and these vapours will soon produce rain.

If the sun appears white at his setting, or shorn of his rays, or goes down into a bank of clouds, which lie in the horizon; all these are signs of approaching or continuing bad weather.

If the moon looks pale and dim, we are to expect rain; if red, it is a sign of wind; and if white, and of her natural colour, and the sky clear, it will be fair weather, according to a poetical adage:

Pallida luna pluit, rubicunda flat, alba serenat.

If the moon is rainy throughout her course, it will clear up at the ensuing change, and the rain will probably commence again in a few days after, and continue; if, on the contrary, the moon has been

fair throughout, and it rains at the change, the fair weather will probably be restored about the fourth or fifth day of the moon, and continue as before.

“ Sin ortu quarto (namque is certissimus autor)
Pura, neque obtusis per cœlum cornibus ibit,
Totus et ille dies, et qui nascentur ab illo
Exactum ad mensem, pluvia ventisque carebunt.

VIRG. Georg. 132.

“ But four nights old (for that's the surest sign)
With sharpen'd horns, if glorious then she shine :
Next day, not only that, but all the moon,
'Till her revolving race be wholly run,
Are void of tempests.”

DRYDEN.

N. B. A gentleman who cuts hay for his own consumption, will seldom fail to find his account in marking this observation; but a farmer who has much business to do, cannot contract his work into so small a compass, as to save himself by the benefit of this observation, because some of his work must be done to make way for the rest.

If the sun rise red and fiery, wind and rain.

If cloudy, and the clouds soon decrease certain fair weather.

These two rules may be extended to all the heavenly bodies; for as their rays pass through the atmosphere, the vapours in the air have the same effect on each.

When the farmer therefore sees the sun or moon rise or set red and fiery, or sees the clouds and

horizon of that colour, he may expect wind and rain, owing to the unequal distribution of the vapours, or to their being already collected into watery globules by some preceding cause.

But if, according to the second rule, the sun rises cloudy, and the clouds soon decrease, the vapours are more equally distributed in the atmosphere; which equal distribution is also promoted by the warmth of the rising sun. Hence we may account for an observation adopted into all languages.

“ The evening *red*, the morning *grey*,
Are sure signs of a *fair* day.”

For if the abundance of vapours denoted by the red evening sky falls down in dew, or is otherwise so equally dispersed in the air, that the morning shall appear grey, we may promise ourselves a fair day from that equal state of the atmosphere.

If in the morning, some parts of the sky appear green between the clouds, while the sky is blue above, stormy weather is at hand.

The great lord Bacon gives us the following rules to judge of the ensuing weather, from the first appearance of the moon; and it is said that these rules of his have never been known to fail.

If the new moon does not appear till the fourth day, it prognosticates a troubled air for the whole month.

If the moon, either at her first appearance or within a few days after, has her lower horn obscured or dusky, or any wise sullied, it denotes foul weather before the full; but if she be discoloured in

the middle, storms are to be expected about the full, or about the wane, if her upper horn is affected in like manner.

When the moon, on her fourth day appears fine and spotless, her horns unblunted, and neither flat nor quite erect, but betwixt both, it promises fair weather for the greatest part of the month.

An erect moon is generally threatening and unfavourable, but particularly denotes wind; though if she appear with short blunted horns, rain is rather expected.

Most of the foregoing rules are taken from the following beautiful passage of Virgil:—

Observe the daily circle of the sun,
And the short year of each revolving moon:
By them thou shalt foresee the following day;
Nor shall a starry night thy hopes betray.
When first the moon appears, if then she shrouds
Her silver crescent, tipp'd with sable clouds,
Conclude she bodes a tempest on the main,
And brews for fields impetuous floods of rain.
Or if her face with fiery flushings glow,
Expect the rattling winds aloft to blow.
But four nights old (for that's the surest sign),
With sharpen'd horns if glorious then she shine;
Next day, not only that but all the moon,
'Till her revolving race be wholly run,
Are void of tempests both by sea and land.

* * * * *

Above the rest, the sun, who never lies,
Foretels the change of weather in the skies;
For if he rise unwilling to his race,
Clouds on his brow and spots upon his face;

Or if thro' mists he shoots his sullen beams,
Frugal of light, in loose and straggling streams,
Suspect a drizzling day with southern rain.

* * * * *

Or if Aurora, with half open'd eyes,
And a pale sickly cheek, salute the skies ;
How shall the vine, her tender leaves defend
Her teeming clusters when the storms descend ?

* * * * *

But, more than all, the setting-sun survey,
When down the steep of heav'n he drives the day :
For oft we find him finishing his race,
With various colours erring on his face ;
If fiery red his glowing globe descends,
High winds and furious tempests he portends
But if his cheeks are swoln with livid blue,
He bodes wet weather by his wat'ry hue ;
If dusky spots are varied on his brow,
And, streaked with red, a troubled colour show,
That sullen mixture shall at once declare,
Winds, rains, and storms, and elemental war.

* * * * *

But if with purple rays he brings the light,
And a pure heav'n resigns to quiet night,
No rising winds nor falling storms are nigh.

Signs from the Winds.

When the wind veers about, uncertainly, to several points of the compass, rain is pretty sure to follow.

Some have remarked, that if the wind, as it veers about, follows the course of the sun, from the east towards the west, it brings fair weather ; if the contrary, foul ; but there is no prognostic of rain more

infallible, than a whistling or howling noise of the wind.

When the wind turns to north-east, and it continues there two days without rain, and does not turn south the third day, nor rain the third day; it is likely to continue north-east for eight or nine days all fair, and then to come south again.

If it turns again out of the south to the north-east with rain, and continues in the north-east two days without rain, and neither turns south nor rains the third day, it is likely to continue north-east two or three months.

The wind will finish these turns in three weeks.

After a northerly wind, for the most of two months or more, and then coming south, there are usually three or four fair days at first, and then on the fourth or fifth day comes rain, or else the wind turns north again and continues dry.

If it returns to the south within a day or two, without rain, and turns northward with rain, and returns to the south in one or two days, as before, two or three times together after this sort, then it is likely to be in the south or south-west two or three months together, as it was in the north before.

The winds will finish these turns in a fortnight.

Fair weather for a week, with a southerly wind, is likely to produce a great drought, if there has been much rain out of the south before. The wind usually turns from the north to south with a quiet wind without rain; but returns to the north

with a strong wind and rain. The strongest winds are when it turns from south to north by west.

If you see a cloud rise against the wind, or side wind, when that cloud comes up to you, the wind will blow the same way the cloud came. The same rule holds of a clear place, when all the sky is equally thick, except one clear edge.

When the north wind first clears the air, which is usually once a week, be sure of a fair day or two.

The following are the observations of Lord Bacon :

When the wind changes conformable to the motion of the sun, that is, from east to south, from south to west, &c. it seldom goes back, or if it does, it is only for a short time ; but if it moves in a contrary direction, viz. from east to north, from north to west, it generally returns to the former point, at least before it has gone quite through the circle.

When winds continue to vary for a few hours, as if it were to try in what point it should settle, and afterwards begin to blow constant, they continue for many days.

If the south wind begins for two or three days, the north wind will blow suddenly after it ; but if the north wind blows for the same number of days, the south will not rise till after the east has blown some time.

Whatever wind begins to blow in the morning, usually continues longer than that which rises in the evening.

Mr. Worlidge observes, that " if the wind be

east or north-east in the fore part of the summer, the weather is likely to continue dry: and if westward toward the end of the summer, then will it also continue dry: if in great rains the winds rise or fall, it signifies the rain will forthwith cease.

“If the colours of the rainbow tend more to red than any other colour, wind follows; if green or blue, are predominant, rain.”

From Nocturnal Meteors.

When an Aurora borealis appears, after some warm days, it is generally succeeded by a coldness of the air.

Signs of the Change of Weather from the Animal Creation.

So long as the swallows fly aloft after their prey, we think ourselves sure of a serene sky; but when they skim along near the ground, or the surface of the water, we judge the rain is not far off, and the observation will seldom fail: in the year 1775, a drought of three months continuance broke up at the summer solstice: the day before the rain came upon us, the swallows flew very near the ground, which they had never done in the fine weather.

In the mountainous country of Derbyshire, which goes by the name of *the Peak*, the inhabitants observe, that if the sheep wind up the hills in the morning to their pasture, and feed near the tops, the weather, though cloudy and drizzling, which

is very frequently the case in those parts, will clear away by degrees, and terminate in a fine day ; but if they feed in the bottoms, the rains will continue and increase.

Dogs grow sleepy and stupid before rain, and show that their stomachs are out of order, by refusing their food, and eating grass, that sort which is hence called *dog's grass* : this they cast up again soon afterwards, and with it the foulness that offended their stomachs. Water-fowl dive and wash themselves more than ordinary ; and even the fish in rivers are affected, because all anglers agree, that they never bite freely when rain is depending. *Vide*, part 1st, rule 16th. Flies, on the contrary, are particularly troublesome, and seem to be more hungry than usual ; and toads are seen in the evening, crawling across the road or beaten path, where they seldom appear but when they are restless with an approaching change.

Before any considerable quantity of rain is to fall, most living creatures are affected in such sort as to render them some way sensible of its approach, and of the access of something new to the surface of the earth, and of the atmosphere. Moles work harder than ordinary, they throw up more earth, and sometimes come forth : the worms do so too ; ants are observed to stir about, and bustle more than usually for some time, and then retire to their burrows before the rain falls. All sorts of insects and flies are more stirring and busy than ordinary. Bees are ever on this occasion in fullest employ ;

but betake themselves all to their hives, if not too far for them to reach before the storm arises. The common flesh-flies are more bold and greedy; snails, frogs, and toads, appear disturbed and uneasy. Fish are sullen and made qualmish by the water, now more turbid than before. Birds of all sorts are in action; crows are most earnest after their prey, as are also swallows and other small birds, and therefore they fall lower, and fly nearer to the earth in search of insects and such other things as they feed upon. When the mountains of the north begin to be capped with fogs, the moor-cocks and other birds quit them, fly off in flocks, and betake themselves to the lower lands for the time. Swine discover great uneasiness; as do likewise sheep, cows, and oxen, appearing more solicitous and eager in pasture than usual. Even mankind themselves are not exempt from some sense of a change in their bodies.

Against rain fleas bite more than common, spiders crawl abroad, bees stir not far from their hives. On the contrary spiders' webs in the air, or on the grass or trees, foretel very fair and hot weather; so do bees when they fly far from their hives, and come late home; and likewise a more than usual appearance of glow-worms by night. If gnats play up and down in the open air near sun-set, they pre-sage heat, if in the shade, warm and mild showers; but if they join in stinging those that pass by them, cold weather and much rain may be expected. Larks rising very high, and continuing to sing for a

long time, and kites flying aloft, are signs of fair and dry weather. In men, frequently aches, wounds, and corns, are more troublesome, either towards rain or towards frost.

Virgil's beautiful description of this sense in animals, is thus rendered by Mr. Dryden :

Wet weather seldom hurts the most unwise ;
 So plain the signs, such prophets are the skies :
 The wary crane foresees it first, and sails
 Above the storm, and leaves the hollow vales :
 The cow looks up, and from afar can find
 The change of heav'n, and snuffs it in the wind.
 The swallow skims the river's watry face,
 The frogs renew the croaks of their loquacious race.
 The careful ant her secret cell forsakes,
 And draws her eggs along the narrow tracks.
 Huge flocks of rising rooks forsake their food.
 And, crying, seek the shelter of the wood.
 Besides, the several sorts of wat'ry fowls,
 That swim the seas, or haunt the standing pools,
 Then lave their backs with sprinkling dews in vain,
 And stem the stream to meet the promis'd rain.
 Then, after showers, 'tis easy to descry,
 Returning suns, and a serener sky.

* * * * *
 Their litter is not toss'd by sows unclean.

* * * * *
 And owls, that mark the setting-sun, declare
 A star-light ev'ning, and a morning fair.

* * * * *
 Then thrice the ravens rend the liquid air,
 And croaking notes proclaim the settled fair :
 Then round their airy palaces they fly
 To greet the sun ; and, seiz'd with secret joy,

When storms are overblown, with food repair
To their forsaken nests and callow care.

The crow has been particularly remarked by the ancients to presage rain, when she caws, and walks alone on the sea-shore, or on the banks of rivers and pools. Thus Virgil, in the first Georgic.

Tum cornix raucâ pluviam vocat improba voce,
Et sola in sicca secum spatatur arena.

The crow with clamorous cries the shower demands,
And single stalks along the desert sands.

DRYDEN.

Pliny makes the same observation, in the 35th chap. of his 18th book : Et cum terrestres volucres contra aquas clangores fundentes sese sed maximè cornix : “ It is a sign of rain, when land-fowl, and especially crows, are clamorous near waters, and wash themselves.”

Horace also expresses himself to the same purpose, in the 17th Ode of the third book, where he says,

————— Aquæ nisi fallit augur,
Annosa cornix.

————— “ unless in vain
Croaks the old crow presaging rain.”

Likewise in the 27th Ode of the same book, he calls the crow, *divinam imbrum imminantium* ; prophetic of impending showers.

Prognostics continued.

1. "A dark, thick, sky, lasting for some time without either sun or rain, always becomes first fair, then foul," i. e. changes to a fair, clear sky, before it turns to rain. This the Rev. Mr. Clarke, who kept a register of the weather for thirty years, since put into Mr. Derham's hands, by his grandson, the learned Dr. Samuel Clarke: this, he says, he scarce ever knew to fail; at least when the wind was in any of the easterly points: but Mr. Derham has observed the rule to hold good, be the wind where it will. And the cause is obvious: The atmosphere is replete with vapours, which, though sufficient to reflect and intercept the sun's rays from us, yet want density to descend; and while the vapours continue in the same state, the weather will do so too.

Accordingly, such weather is generally attended with moderate warmth, and with little or no wind to disturb the vapours, and an heavy atmosphere to sustain them, the barometer being commonly high. But when the cold approaches, and by condensing, drives the vapours into clouds or drops, then way is made for the sun-beams; till the same vapours being, by further condensation, formed into rain, fall down into drops.

2. "A change in the warmth of the weather, is generally followed by a change in the wind." Thus, the northerly and southerly winds, com-

monly esteemed the causes of cold and warm weather, are really the effects of the cold or warmth of the atmosphere : of which Mr. Derham assures us he has had so many confirmations, that he makes no doubt of it. Thus it is common to see a warm southerly wind suddenly changed to the north, by a fall of snow or hail ; or to see the wind, in a cold frosty morning, north, when the sun has well warmed the earth and air, wheel towards the south ; and again turn northerly or easterly in a cold evening.

3. “ Most vegetables expand their flowers and down in sun-shiny weather, and towards the evening ; and against rain close them again ;” especially at the beginning of their flowering, when their seeds are tender and sensible. This is visible enough in the down of dandelion, and other downs : and eminently in the flowers of pimpernel ; the opening and shutting of which, Gerard observes, are the countryman’s weather-guide for the following day. The rule is, if the flowers are close shut up, it betokens rain and foul weather : if they are spread abroad, fair weather.

The stalk of trefoil, Lord Bacon observes, swells against rain, and grows more upright : and the like may be observed, though not so sensibly, in the stalks of most other plants.

That vegetables should be affected by the same causes that affect the weather, is very conceivable ; if we consider them as so many hygrometers and thermometers, consisting of an infinite number of

tracheæ or air vessels ; by which they have an immediate communication with the air and partake of its moisture and heat, &c. These tracheæ are very visible in the leaf of the scabiose, vine, &c.

Hence it is, that all wood, even the hardest and most solid, swells in moist weather; the vapours easily insinuating themselves into the pores, especially of that which is lightest and driest. And hence we derive a very extraordinary use of wood, viz. for breaking rocks and mill-stones. The method at the quarries is this: Having cut a rock into a cylinder, they divide that into several lesser cylinders, by making holes at the proper distances round the great one: these holes they fill with so many pieces of saw wood, dried in an oven; which, in moist weather, becoming impregnated with the humid corpuscles of the air, swell; and, like wedges, break or cleave the rocks into several stones.

The speedy drying of the surface of the earth, is a sign of a northerly wind and fair weather; and its becoming moist, of southerly wind and rain. Hence the farmer may be instructed, never to trust a sun-shiny day, while the surface of the earth continues wet; and to rely on a change to dry weather, as soon as he observes the moisture dried up, even though the appearance of the clouds should not be favorable; for the air sucks up all the moisture on the surface of the earth, even though the sky be overcast, and that is a sure sign of fair weather; but if the earth conti-

nues moist, and water stands in shallow places, no trust should be put in the clearest sky, for in this case it is deceitful.

More Prognostics taken from Rain.

Sudden rains never last long: but when the air grows thick by degrees, and the sun, moon, and stars shine dimmer and dimmer, it is likely to rain six hours usually,

If it begins to rain from the south, with a high wind, for two or three hours, and the wind falls, but the rain continues, it is likely to rain twelve hours or more; and does usually rain till a strong north wind clears the air: these long rains seldom hold above twelve hours, or happen above once a year. "In an inland country," says Mr. Mills, "it may not rain for more than twelve hours successively; but I doubt this will hold a general rule, either of its duration or frequency, in all places; for near the sea, rains happen often, which last a whole day."

If it begins to rain an hour or two before sun-rising, it is likely to be fair before noon, and to continue so that day; but if the rain begins an hour or two after sun-rising, it is likely to rain all that day, except the rainbow be seen before it rains.

Mr. Worlidge's signs of rain are the following:

"The audibility of sound are certain prognostics of the temper of the air in a still evening; for if the

air is replete with moisture over us, it depresses the sounds, so that they become audible to a greater distance than when the air is free from such moisture and vapours. From whence you may conclude, that in such nights, or other times, when you hear the sound of bells, noise of water, beasts, birds, or any other sounds or noises, more plainly than at other times, the air is inclinable to rain, which commonly succeeds."

"If the earth, or any moist or fenny places yield any extraordinary scents or smells, it presages rain."

"If dews lie long in the morning on the grass, &c. it signifies fair weather; but if they rise or vanish suddenly and early in the morning, it presages rain."

"There is a small bird of the size and nearly the shape of a martin, that at certain times flies very near the water, which is a most sure prognostic of tempestuous weather; never appearing but against such weather, as hath been constantly observed by the boatmen on the Severn and the channel, between the Isle of Wight and the main-land."

"Ducks and geese picking their wings, washing themselves much, or cackling much, denotes rain."

"If after rain comes a cold wind, there will be more rain."

The nightly virgin, whilst her wheel she plies,
Foresees the storm impending in the skies,
When sparkling lamps their sputt'ring light advance.
And in their sockets oily bubbles dance.

DRYDEN'S VIRGIL.

If the last eight days of February, and the first twenty days of March, are for the most part rainy, then the Spring and Summer quarters will be so too; and I never knew a great drought but it entered in at that season.

If the latter end of October and beginning of November are for the most part warm and rainy, then January and February are likely to be frosty and cold, except after a very dry Summer.

If there is frost and snow in October and November, then January and February are likely to be open and mild.

Mr. Claridge gives us the following observations made by our forefathers :

Janiveer freeze the pot by the fire.

If the grass grows in Janiveer,

It grows the worse for 't all the year.

The Welshman had rather see his dam on the bier,

Then see a fair Februcer.

March wind and May sun,
Make cloths white and maids dun.
When April blows his horn,
'Tis good both for hay and corn.
An April flood
Carries away the frog and her brood.
A cold May and windy
Makes a full barn and a findy.
A May flood never did good.
A swarm of bees in May
Is worth a load of hay.
But a swarm in July
Is not worth a fly.

The following Rules are by Lord Bacon :

If the wainscot or walls that used to sweat be drier than usual, in the beginning of Winter, or the eaves of houses drop more slowly than ordinary, it portends a hard and frosty Winter ; for it shows an inclination in the air to dry weather, which, in Winter, is always joined with frost.

Generally, a moist and cold Summer portends a hard Winter.

A hot and dry Summer and Autumn, especially if the heat and drought extend far into September, portend an open beginning of Winter, and cold to succeed towards the latter part, and beginning of Spring.

A warm and open Winter portends a hot and dry Summer, for the vapours disperse into the Winter showers ; whereas cold and frost keep them in,

and convey them to the late Spring and following Summer.

Birds that change countries at certain seasons, if they come early, show the temper of the weather, according to the country whence they came; as, in Winter, woodcocks, snipes, fieldfares, &c. if they come early, show a cold Winter; and the cuckoos, if they come early, show a hot Summer to follow.

A serene Autumn denotes a windy Winter; a windy Winter a rainy Spring; a rainy Spring, a serene Summer; a serene Summer, a windy Autumn; so that the air, on a balance, is seldom debtor to itself: nor do the seasons succeed each other in the same tenor for two years together.

Mr. Worlidge remarks, that if at the beginning of the Winter, the south wind blow, and then the north, it is likely to be a cold Winter; but if the north wind first blow, and then the south, it will be a warm and mild Winter.

When there are but few nuts, cold and wet harvest generally follow; but when there is a great show of them, hot, heavy, and dry harvests succeed.

If the oak bears much mast, it foreshows a long and hard Winter. The same has been observed of hips and haws.

If broom is full of flowers, it usually signifies plenty.

“ Mark well the flow’ring almonds in the wood;
If od’rous blooms the bearing branches load,

The glebe will answer to the Sylvan reign,
 Great heats will follow, and large crops of grain.
 But if a wood of leaves, o'ershade the tree,
 Such and so barren will the harvest be.
 In vain the hind shall vex the threshing floor,
 For empty chaff and straw will be thy store.

DRYDEN'S VIRGIL.

In the Preface to this new Edition, I have taken notice, that I have not revised any impression of this Treatise since the Fifth, and at the conclusion of that have observed, "that through the uncertainty of life I might not do so again." However, through the blessings of the ALMIGHTY, I am enabled to present the Reader with a new Copy, and again take my leave of him, wishing him health, prosperity, and good sport. I shall now (following the example of my pious predecessor Walton), Address THAT POWER, who penetrates and sustains all Nature who brings round the grateful vicissitude of the Seasons, who has given us the inhabitants of the watery element not only for our nourishment, but recreation, and Whom we are sure to please, by receiving His blessings thankfully, and enjoying them with propriety.

HYMN.

FATHER of all !—all good !—all wise !
 Who bid'st the tempest rage or cease ;
 Whose glory fills earth, seas, and skies,
 Thou only source of joy and peace ;

Thy wise decrees are right and just,
Let no one, impious ! tax thy will ;
But on thy glorious mercies trust,
And see a good, thro' ev'ry ill :

Arm—arm, with fortitude my breast,
The various ills of life to bear ;
And teach thy servant when at rest,
For storms and troubles to prepare :

But thro' whate'er distressful scene,
Thy righteous hand may lead me still ;
Resign'd to what may evil seem,
Content my breast shall calmly fill :

And as the seasons onward roll,
And years revolving quickly fly ;
Sweet gratitude shall warm my soul,
For all the blessings I enjoy :

Still—still I'll praise that heav'nly Source,
For what it pleases to bestow ;
That petrifies the streamlet's course,
Or bids its silver current flow ;

That regulates creation's laws,
Bids all in harmony unite ;
And is,—*The Universal Cause*,
Of ev'ry thing that's good and right.

A TABLE of the Sun's Rising every Third Day in the Year.

	2.	5.	8.	11.	14.	17.	20.	23.	26.	29.
<i>January</i>	8.09	8.07	8.04	8.01	7.58	7.54	7.50	7.45	7.40	7.35
<i>February</i>	7.30	7.24	7.18	7.12	7.07	7.01	7.55	6.50	6.44	6.39
<i>March ..</i>	6.36	6.30	6.24	6.11	6.12	6.06	6.00	5.54	5.48	5.42
<i>April</i>	5.34	5.28	5.23	5.17	5.11	5.05	5.00	4.54	4.49	4.44
<i>May</i>	4.38	4.33	4.28	4.23	4.19	4.15	4.10	4.07	4.03	4.01
<i>June</i>	3.56	3.54	3.52	3.50	3.49	3.48	3.47	3.48	3.48	3.49
<i>July</i>	3.51	3.52	3.54	3.57	4.00	3.03	4.06	4.10	4.15	4.19
<i>August ..</i>	4.25	4.30	4.35	4.40	4.45	4.50	4.56	5.01	5.07	5.32
<i>September</i>	5.20	5.26	5.32	5.38	5.41	5.49	5.55	6.01	6.07	6.13
<i>October ..</i>	6.19	6.25	6.31	6.36	6.42	6.48	6.54	7.00	7.02	7.11
<i>November</i>	7.16	7.23	7.29	7.34	7.39	7.44	7.48	7.50	7.59	8.00
<i>December</i>	8.43	8.05	8.68	8.10	8.11	8.42	8.13	8.13	8.12	8.01

To know the Sun's setting, you need only subtract the rising from 12. For instance, the Sun rises January 2nd, at nine minutes after 8, which, subtracted from 12, there remains 3 hours, 51 minutes, which is the time of the Sun's setting, viz. 51 minutes after 3 in the afternoon. To find the length of the day, double the setting; for the length of the night double the rising.

MOON'S RISING AND SETTING.

At 4 days old it sets at and shines till about 10 at night.	16. at a quarter after 7 evening.
5, about 11.	17, at half after . . 8.
6, about 12.	18. . . about . . 10.
7, at or near 1 in the morning.	19. . . about . . 11.
15, at full, it rises about 6 evening.	20. . . about - . 12.

Note. This Table is sufficiently accurate for the purpose it is wanted for, that of ascertaining Moon-light evenings.

CHAP. VIII.—*Rules to Judge of the
Barometer.*

By the help of the barometer, we seem to regain that foreknowledge of the weather which still resides in brutes, and which we have forfeited, by not continuing in the open air, as they generally do, and, by our intemperance, lessening our sensibility of external objects.

The changes that take place in the atmosphere are principally marked by the rising and falling of the barometer which apparently is caused by heat and cold, the hands with which Nature performs her *meteorological operations*; by the former the atmosphere is rarefied, and consequently becomes light: by the latter it is condensed, and consequently becomes heavy.

The barometer falls suddenly while the air is expanded before a gale of wind, and rises again gradually as the condensed air returns, and the gale in like manner by degrees subsides.

An extraordinary fall of the mercury will sometimes take place in Summer, previous to heavy showers of rain, particularly if attended with

thunder and lightning ; but in Spring, Autumn, and Winter, the sudden extraordinary descent of the barometer indicates principally violent wind.

The thermometer also, which measures the degree of heat in the air near the earth, will contribute towards denoting when changes are likely to take place in the lower regions of the atmosphere. The hygrometer distinguishes the quantity of moisture in the atmosphere, and the electrometer will point out the quantity of electricity which prevails in it.

The words generally engraven on the plates of the barometer, serve rather to mislead than inform ; for the changes of the weather depend rather on the rising or the falling of the mercury, than of its standing at any particular height.

When the mercury is as high as fair, or at 30 degrees, and the surface of it is concave, beginning to descend, it very often rains ; and on the contrary when even the mercury is at 29 degrees, opposite to rain, when the surface of it is convex, beginning to rise, fair weather may be expected : these circumstances not being known, or not being duly attended to, is the principal cause that farmers and others have not a proper confidence in this instrument.

It must be observed that *cæteris paribus*, the mercury is higher in cold, than in warm weather, and commonly early in the morning, or late in the evening, than at noon, which seems occasioned by the obvious causes of the atmosphere being con-

densed by the cold of the night, and rarefied by the heat of the day.

The following observations deserve attention.

1st. The smallest alterations in the mercury are to be observed (especially in a showery time).

2nd. The rising of the mercury presages, in general, fair weather, and its falling, foul.

3rd. In very hot weather the falling indicates thunder.

4th. In Winter the rising presages frost ; and in frosty weather, if the mercury falls three or four divisions, a thaw ; but in a continued frost, if it rises, it will certainly snow.

5th. When foul weather happens soon after the falling of the mercury, expect but little of it ; and on the contrary, expect but little fair weather, when it proves fair shortly after the mercury has risen.

6th. In foul weather, when the mercury rises much and high, and continues so for two or three days, before the foul weather is quite over, then expect a continuance of fair weather to follow.

7th. In fair weather, when the mercury falls much and low, and continues so for two or three days, before the rain comes—then expect a great deal of wet, and probably high winds.

8th. The unsettled motion of the mercury, denotes changeable weather.

9th. If the mercury stands at much rain, and then rises up to changeable, it presages fair weather.

although not to continue so long as it would have done if the mercury were higher : So, on the contrary, if the mercury stood at fair, and falls to changeable, it presages foul weather ; but fouler if it sinks down lower.

But to these remarks it may be added, that when the barometer suddenly falls two or three tenths, without any material alteration in the thermometer, and the hygrometer is not much turned towards moist, a violent gale of wind may be expected.

When the hygrometer inclines far towards moist, with only a trifling descent in the barometer, it denotes a passing shower and little wind ; and when the barometer falls considerably, and the hygrometer turns much towards moist, the thermometer remaining stationary, and rather inclining to rise than fall, both violent wind and rain are likely to follow in the course of a few hours.

The barometer, is highest during a long frost, and generally rises with a North-East-Wind : it is lowest during a thaw following a long frost, and is often brought down by a South-West-Wind.

When the barometer is near the high extreme for the season of the year, there is very little probability of immediate rain.

When the barometer is low for the season, there is seldom a great weight of rain, though a fair day in such a case is rare : the general tenor of the weather at such times is, short, heavy and sudden showers, with squalls of wind from the S. W. or N. W.

In Summer after a long continuance of fair weather, with the barometer high, it generally falls gradually, and for one, two, or more days before there is much appearance of rain ; if the fall be sudden and great for the season, it will be probably followed by thunder.

When the appearances of the sky are very promising for fair, and the barometer at the same time low ; it may be depended upon that the appearance will not continue so long ; the face of the sky changes very suddenly on such occasions.

Very dark and dense clouds pass without rain when the barometer is high : whereas when the barometer is low, it sometimes rains, without almost any appearance of clouds.

All appearances being the same, the higher the barometer is, the greater the probability of fair weather.

Thunder is almost always preceded by hot weather, and followed by cold and showery weather.

A sudden and extreme change of temperature of the atmosphere, either from heat to cold, or cold to heat, is generally followed by rain within 24 hours.

In Winter during a frost if it begins to snow, the temperature of the air generally rises to 32 degrees of the thermometer, and continues there whilst the snow falls ; after which, if the weather clears up, expect severe cold.

The Aurora Borealis, is a prognostic of fair weather.

Dr. Kirwan has deduced from a variety of meteorological observations (to which he has had access) made in England between the year 1677 and 1788 the following probabilities or hints towards forming prognostics of the weather, viz.

“ That when there has been no storm before or after the Spring equinox, the ensuing Summer is generally dry ; at least five times in six.

“ That when a storm happens from any Easterly point, either on the 19th, 20th, or 21st, of March, the succeeding Summer is generally dry, four times in five.

“ That when a storm arises, on the 25th, 26th, or 27th of March, and not before in any point ; the succeeding Summer is generally dry, four times in five.

“ If there be a storm at S. W. or W. S. W. on the 19th, 20th, or 22nd of March, the succeeding Summer is generally wet ; five times in six.”

In September and October the Winter constitution of the air begins to show itself. The great falls of the barometer, from October to April, are from 29,5 to 28,5, sometimes lower.

From April to October it seldom falls lower than 29,5 ; it therefore follows, that a fall of one inch during the Summer, is as sure an indication of rain, as a fall of between two or three tenths is in the Winter.

END OF ART OF ANGLING.

THE
COMPLETE TROLLER;

OR,
THE ART
OF
TROLLING;

WITH
Descriptions of all the Instruments, Tackle, and Materials,
REQUISITE FOR A

GENTLEMAN TROLLER,

AND
Directions how to use them.

By ROBERT NOBBS, Esq. A. M.

“ ——— TRAHIT SUA QUEMQUE VOLUPTAS.”

COMPLETE TROLLER

OR

THE ART

OF

TROLLING;

WITH

Descriptions of all the Instruments, Tools, and Materials,

REQUISITE FOR A

GENTLEMAN TROLLER,

AND

By ROBERT NOBLE, Esq. A.M.

THE TROLLING TOLLER

THE
COMPLETE TROLLER:
OR,
THE ART
OF
TROLLING.

The Harbour of a Pike.

THE harbour of a pike is usually amongst or near a bank of weeds; for they are his chief refuge; and if he be frightened by a net or the sudden disturbance of his approaching enemy, he strikes to his harbour, and there keeps his garrison. The weeds which he most delights in, are flags and bull-rushes, candocks, reeds, green fog, and a weed with a small leaf, which he often frequents, especially about October, when they begin to rot. If a place is very thick and weedy, you cannot easily guess exactly where his lodgings are, but if the river is free from weeds, only here and there a bank or bed of bull-rushes, you may safely conclude those are his retirements and baiting places.

If the river is broad, deep, and, straight, like a scour, it will be the more difficult to find his recess; and if there are but few fish, it will be next to seeking a needle in a bottle of hay; for in such false rivers, you may troll perhaps from morning till night and scarcely get a run. But if such a place is little beaten, and have plenty of fish, you may have sport enough: then you must arm yourself with patience, and fish it very true and slow. There is not much variety and delight in trolling such a river, because it is all along even and alike, and you cannot conceive where your prey lies: this you may call hap-hazard, and expect a run every throw, though you go three or four hours, and neither see nor feel any fish but your own bait.

The best and securest way of fishing these wide reaches is by drawing the bait along the sides next to you, unless you can search the breadth of it, and throw over to the farther side: but that is but dull and slow sport, it will take much time to troll the length of a furlong. If your river consists of pits, which is the quickest and most delightful way of trolling, you must have a special regard to the top and bottom of the pit. A pike may be taken sometimes in the middle, but his chief seat and habitation is at the bottom of the pit; and this I have often observed, that where one pike has been taken at the mouth, another has been found at the foot, or bottom of the pit.

These are the ordinary places; yet according to the variety of weather and seasons of the year, a

pike will alter and change his dwelling. In the Winter he usually couches very nigh the ground, and gets into the deepest and obscurest places. About the latter end of February, or the beginning of March, he begins to be weary of his melancholy repose, and to raise himself a little from the bottom, and is more active in seeking his food: at the latter end of March, or sometimes the middle, he shoots in the scours, and there leaves the spawn to multiply according to its kind. In April and May, he still gets higher, and advances himself into the shallows; and, if unmolested there, he will so continue most part of the Summer. In September, he begins to retreat again, and removes himself from his harbour to visit his Winter quarters, which will be much the same as before, if no floods disorder him. This is his yearly course, to change according to heat or cold, so that a pike, like a person of quality, hath both a Winter and a Summer-house.

As to his daily transaction, he thus disposes of himself. In a hot gloomy day, he gets to the surface of the water, as if he had a desire to exchange his element to enjoy the comfortable influence of the airy region: he then scorns to be tempted with a bait, and can live all day with a little more nourishment than the motes in the sun; for you no sooner offer him the kindness of a deceitful bait, than he is gone as swift as lightning.

A ford that is clear and gravelly at the bottom, especially if it have a pit adjoining to it that is deep and weedy, is looked upon as a probable place; for

though they generally affect a deep water, yet they will get as near as they can to a ford or shallow; there they delight themselves, and sport with the little fry. Thus, scours and pits that are near mills, either above or below them, are commonly well stored with fish: a mill-dam that is deep and weedy is an approved receptacle for them. Rivers that are straight and level, are not so good as those that are crooked and have many corners and turnings; for the fish will get into those creeks and channels, and hide themselves in private apartments. If the water is narrow, it is more pleasing for the troller; for you may fish both sides, and the sooner find them; you will then go on the faster and with more courage, and drive forward to your journey's end; but this is chiefly as every one fancies, for some desire the widest places they can find, and fix themselves two or three hours without any considerable motion. I never approved of that dull way, because a pike, if he bites, commonly rises at it the first throw, though he may sometimes snap at it when you have the least thought of him.

As to the nature or constitution of the river, the deeper is generally the better and the safest harbour; although they delight in a middle retirement. About four feet in depth is a right proportion, and the best pitch for the troller; for if it be much deeper, they are the more difficult to stir, and harder to find; and if shallower, they will be apt to see you. Small jack will often lie within two, or sometimes one foot in water; it is the wisest course

in such places to keep at a distance, and not come near the river till the bait is in.

The best Seasons for Trolling.

Though the depth of winter cannot be recommended for angling, yet there are some days in December or January, that a man may pick out to stand two or three hours by the river side, but the weather must be open and temperate: the great fish will be soonest enticed with the bait at that time of the year, because they lie deep, and are not so careful of their own preservation. There is another great advantage for the winter troller, the weeds are then down and rotten, which are a great hindrance both for throwing the bait, and in keeping the fish from the sight of it. Though a pike delights much among the weeds, and usually makes his abode there, yet it is very difficult to take him there, except it be with the snap; for if you give him the liberty of running and playing with your bait, he winds himself so fast about the weeds, that you may be in some danger of losing both your fish and hook, if your line is not very strong: if you take a snap, you will be troubled with them, for they are great enemies to that.

To begin the year, February is the first, and not the worst month the troller can pitch upon for his sport, after Candlemas, if the season is moderate, and the water in tune, which is very rare; for if it is not a flood, as it is often at that time, yet the ditches

and brooks are commonly so rank and full, that it is but indifferent fishing; but if it chance to be a dry season and open, it is one of the best months. March, too, is very seasonable to the troller, excepting the time of spawning, which usually begins about the middle, unless the Spring is very forward; and then they will be sick sooner. The snap is then the only way. If you fish at pouch, you may have many runs, but scarcely take one except it be a male fish. These two months will try the fisherman's patience, even if he is wind and weather proof: but April will make him amends for his former sufferings. This month he will find most propitious to his pastime, because the weeds which have couched all winter, have not yet erected their heads to annoy the bait, or frustrate the hopes of an impatient fisherman. The river is now clear of fog and filth; and the fish having lately cast their spawn, are now more hungry and ready for their prey; and there is now little fear of their forsaking the bait as they did in March.

The beginning of May is likewise seasonable, especially if it hits with the proverb, cold and windy. Towards the latter end of it, the weeds spring up and are very offensive to the hook; then begins the troller's vacation, which continues till the latter end of August, or the beginning of September.

In the autumnal season, October is the principal month, the weather being then temperate, and the weeds, which were strong and high before, dying and falling to the bottom. The rivers are then ge-

nerally low, which is a great advantage, because the fish are more easily found in their harbours; they leave the shallows and scours, and lodge themselves in pits and the deepest places. A pike is now very firm and fat, having had the benefit of the summer's food: and if the weather continues dry and not extraordinarily cold, you may take in part of November, which will add much to your sport, because the weeds will be more wasted and rotten; but if a flood comes in October, or the beginning of November, you may lay aside your tackling for that season; for great rivers (like great vessels), being long in filling, and slowly mounting to their full height, are again long in falling and settling, so that the water will be thick and out of order, unless frost or fair weather comes to clear it. In small brooks and rivulets it is not so; you may fish there again within a week or less after the flood. If such inconveniences put off your designed sport, you must desist till the following Spring, when the days will be longer, though the weather colder. As to the time of day, the morning and evening is best in Summer; because towards noon the fish get to the top of the water, and are more mindful of their play than their meat. If the day be clear and calm, a snare is more proper than a bait; for the least motion you can make with your line will affright a fish that lies high; and if he is once moved and put to the flight, all the art you can use will not entice him to your bait again: besides it will then be too hot for sport; for heat creates no ap-

petite in any thing, much less in fish ; it is the wind and the cooler clouds, when zephyrus curls the waves with a brisk gale that invites a fish to repast ; those hot and sultry days are fittest for the float, when the fish are for some light diet, and the Angler has the best pastime with flies, bees, &c. At such a time of the year, early or late is the best fishing, if it is in the night. As to the Winter or Spring quarter, one part of the day is as favourable as the other : for then the sun being not so hot, it neither molests the fisher, nor takes away the fishes stomachs. The south and the south-west winds, are the most pleasing to the troller ; and it is granted that the fish are more brisk and quicker at the bait, and perhaps they may then have more sport than when the wind is contrary ; yet this is certain, that the colder the wind is, the closer the fish lie to the bottom, and farther in their harbour, which may hinder you from having so many bites as when they lie out and more open in a warmer day ; yet the air being cold and sharp, it makes them hungry ; and if you are careful, you may have as many fish as bites. Besides a fish of any bigness is too cunning to be cheated of his life, if he lies not securely in the deeps, or invisible among the weeds ; for as old birds are not to be taken with chaff, so an old fish that hath been already pricked in the gills or pouch, is very cautious in making a second adventure. The principal and chiefest time for trolling may be epitomized into four months, two of which attend the Spring, and two the fall ; part of March may

conveniently be left out, which will only tantalize with runs and afford you no fish, if you use the pouch; neither will they then bite so freely as they will about a fortnight after, for they are averse and indifferent in their feeding. A pike, in general, takes so much pleasure and delight in eating, that he never cares to stint himself; or physically, for his health's sake, to be content with moderate diet; for I have often taken him so soon after his feeding, that he has had part of his meat in his mouth; having newly swallowed so large a fish, that his ventricle was neither capable to receive or digest it quickly: sometimes I have taken him with two or three baits in his maw; sometimes with a great roach or dace; sometimes with one of his own species, very seldom with a frog in his belly. A frog is accounted a good bait once a year, that is about hay-time, when it looks bright and yellow, though then it is something difficult to find. A pike will feed to such excess and fulness, that he cannot gorge your bait, yet will rise and show himself, and make many offers, having a good will to do it, that you may often catch him with the snap.

The Food of a Pike, and when he is Fattest.

The pike is good throughout the year; the Spring only excepted. I could never find any difference in the eating. It is a usual saying, that a pike and a buck are in season together; that is in July and August: he is then very firm, hard, and solid;

you will find little alteration in September or October. Small jack always eat loose and washy; and therefore ought to be let alone till they get bigger. One about two feet, or twenty-six inches, is most grateful to the palate: a male fish of that size is generally fat and delicious.

A pike out of a river that is fat, is far better and sweeter than one fed in a pond: except he is taken out of the pond, and put into a running stream, to clear a while before he is eaten. Some that are curious, have stews and fountains for that purpose, and can draw them at their pleasure, choosing the fattest, and throwing in the rest.

As to the food of a pike, small fry will keep him very well, though not make him thrive and fatten; grigs, or small eels cut on the backs, and cast in a few at a time, are his most nourishing and fattening diet. Bullock's blood, paunches, and guts, are not wholesome food. You may easily distinguish a fed pike from one in a wasting condition: they differ in the colour, which is usually yellow and spotted, but white and pale when thin: you may also distinguish them by the weight and bulk, if they are much of a length; observing the breadth of the back and sides: for those fish that have full and extended bellies, are often deceitful, and may be full of spawn instead of fat. The male pike is generally firm and inviting to the eater, but the spawners are out of season great part of Summer.

There are many circumstances that conduce much to the feeding of a pike, as, first, a convenient har-

bour; for they that lie among weeds and foggy places are fattest; being there secure from the assaults and disturbance of enemies, and enjoying a more safe and contented repose; for rest and quietness are as natural and helpful to their feeding as to other creatures. Some waters are more nourishing than others. A thicker sort of water, if not foul and muddy, is of a better consistency, and the parts better disposed and qualified for nutrition, than those of a more thin and rarefied substance. It is a common observation, that after a glut of rain, or some great showers, a pike never bites well, because he has lately fed upon those fresh streams that come in from the banks and ditches. This reason may be probably well-founded; for rain-water, scouring through the channels, and washing the land and earth as it passes, may from thence receive a firmer and more solid substance, which may make it more glutinous and congruous for nutrition. It is possible that a pike may live a great while in a clear pool, where there is neither small fry for prey, nor harbour to shelter, nor any kind of fog which might give him subsistence. But I could never hear of any that made trial of this merely for experiment's sake; some persons have put a stock of pikes into their ponds, and have not put in meat proportionable to their number, yet have preserved it many years, denying both themselves and others the liberty of fishing in it. They have drawn it afterwards, ex-

pecting a plentiful increase, and have found nothing answerable to their expectations.

It is well known that fen-fish brought up into clear waters will thrive, and are sweeter; but whether those that are bred in brooks and small streams, carried and put into fen-ditches, will change for the better or the worse, is worth inquiry.

Baits for Trolling.

I now proceed to the consideration of the instruments and tackle, and the baits suitable to every season. Some vary their baits according to the time of the year, using small fish in Winter, and frogs, &c. in Summer. I cannot disapprove of that way, though I seldom made use of any thing but a small fish, a roach or a dace, sometimes a gudgeon, which, if large, is an excellent bait; it being a sweet fish: a pike very rarely leaves it; if it is a dark colour, and therefore is most proper to be used in a bright day, or when the waters are very clear.

If the river is muddy, or the weather cloudy, then a roach, dace, or a bleak newly taken, are the best baits that can be used; the fresher they are the better, for fish are the soonest stale of any thing, and a pike may chance to catch at a stale bait, and play with it briskly at first, but it is great odds that he leaves it at last, if he is not extraordinarily pinched with hunger. A stale bait

(we acknowledge) may make a good shift sometimes, but it must be neither in Summer, nor in spawning time. In April or October the fish are not so curious, but they can dispense with indifferent diet; and in cold weather a bait may keep two or three days, and yet be very serviceable, especially at snap, which makes no difference in baits, as to the sense of tasting; if they look bright and glisten in the water, it is not material whether they are old or new; which affords a greater variety of baits than that of pouch.

Any thing that may affect the eye, may be used at snap; some will take a piece of hard cheese, or pack-wax, a rasher of bacon, or sheep's gut, or almost any thing that is radiant and shining; some will float on the top with a live bird, a swallow or a sparrow; though I judge that may be more out of curiosity than for profit or sport. I never admired this way of snap, as thinking it too quick and surprising, to give any diversion; the sport of trolling consisting more in the managing the bite, in the playing of a pike, and his eager biting and running with the bait; than just a word and a blow, snapping him up and putting him into the bag.

One time of the year the snap is best, that is in March, when they are sick and about casting their spawn; for then, if your snap-hook is made the right way, with springs to strike sure, you may take four or five in the time the pouch takes one. Some fancy the snap-hook plays the bait more lively and natural; though there may be no great difference,

especially if the pouch-hook be fastened to the line with a swivel, which is very conducive to the playing of a bait.

Some fish with live baits, and have short hooks fashioned accordingly, with more joints and without lead; but that is rather a destroying and poaching way, than fair fishing. It makes such a slaughter amongst the fish, that it is not fit to be used; for I have known some rivers that have been quickly eased of their burthen of fish by that unlawful trade.

The method they use is to lay in three or four score of these hooks, which may reach almost a mile: after they have lain four or five hours, or more, or soon after they have lain the last, they begin to take up the first: so that they will kill perhaps a score of pikes and jacks; which is the ready course to empty a river, and engross all the sport to themselves. Whereas two or three at a time is enough to content any moderate troller, that would have others partake of the recreation as well as himself, and not fish above once or twice in a season at the same place. The means to preserve and continue this sport is to favour and cherish it. It is an easy matter indeed to take half a dozen, or more, if you would stick at it a whole day in the beginning of the year, before the waters are beaten or dragged; for then they are so plentiful, that they show themselves in every corner.

As for a sweet and delicious bait, a piece of an eel may be preferred, which if once taken and

tasted, a pike will assuredly feed upon it ; this may be experienced in ponds and stews, when they throw in grigs to feed the pike. Of all the small fish, a perch makes the worst bait, yet that may be used in a case of necessity, if you first cut off the fins and prickles on his back, though when you have done all you can, it will be but to little purpose ; for a perch is like a prince among the fish, and a pike is in so much fear of him, and hath that antipathy against, him, that he will sooner fasten upon one of his own kind than upon him. Yet I have seen small perch taken out of a pike's belly, but it was in a moat where he was kept short and had little else to feed upon. If, however, you are confined to this bait, and can get no other, it is best to scrape off some of the scales, for being a dark fish, this will make it brighter ; and still the snap is the best hook for it, because if the scales of the perch are on, a pike cannot easily gorge or digest it. A small jack is a far better bait, though it seems unnatural ; if it be a foot long, it may be cut in two, and so made use of : a young chub may be very useful, or any fish that shines in the water : a bleak is a very bright bait.

The way to keep and preserve your baits till you have occasion to use them, is first to take a cast-net and throw it, choosing those that are most fit for the purpose ; having a trunk ready to put them in, and then to take them out by two or three as occasion serves. In Summer time you may take them with an angle, but that is very uncertain ; nor can

you have any choice that way, because they will often be too little or too big, besides it spends too much time that is intended for trolling. Sometimes you may take, with one bait fresh out of the trunk, three or four jack, or more; for a fish that bites greedily and swallows the bait presently, does not tear it so much as one that plays with it in his mouth and then leaves it; a bait is not much worse for being chopt and full of holes, provided it hangs well upon the hook, and the lead is not seen; for one pike will feed very well after another, and the bait will be still the sweeter the more it is bitten, if not used so long as to be water-sopt. The scales of a roach or dace, are a great preservation to it, as also light and perspicuous, which render it more visible to the eyes of the great devourers. As to the definitive number of baits, it cannot be easily determined: two or three, if fresh, will last long enough, if you have not very ill luck, for sometimes the first fish that bites will tear the bait, so that it will make it unserviceable and yet not take the pike. But the weeds are most destructive to your baits, especially when they are strong and tough, so that if you are not careful in tying the tail of the bait fast to the joint of the wire, the weed will consume it before the pike comes. Some fish will hold better than others; a dace is one of the hardest, and will endure the longest: but a gudgeon is a tender fish, and will soon burst. Besides these natural baits, there are a sort of artificial ones which are made so exquisitely to resemble the

other, that they will delude the eyes of some men; much rather the fish. Some pretend to fish at pouch with these artificial baits, though it is more probable they were designed for the snap; for a pike will scarcely be courted to gorge and digest that which he can neither taste nor smell. There are indeed some of those artificial baits made after the pouch fashion, whether for sight or service, I cannot conceive; for I more admire the curiosity and ingenuity of the artificer, than any extraordinary excellency or usefulness in the thing. A pike must be very hungry that gorges one of them, and he must do it hastily and greedily; for if he stays to consider, and plays much with it, as some of them do, his palate will presently distinguish a fresh and well-relishing morsel from a dry and insipid bit.

Those that are covetous may have two strings to their bow, by taking a gudgeon of a middle size, or a large minnow; for then they may be in hopes of taking large perch as well as pike; for a minnow is an excellent bait for perch: great baits invite a pike, but little ones are more secure to take him.

Pouch-Hook.

Of pike or jack hooks there are several sorts, both for the snap and pouch, the latter of which only we shall endeavour to describe in this place; though the spring-hooks are esteemed excellent, and strike sure, the ordinary plain snap-hook will miss often. Of pouch-hooks there are many sorts, though I

never made use of them:—It is best to choose them of a dark bluish colour, the lead not very gross, but neatly covered, without any flaws or hollows in it.

If it be pretty weighty, it plays the bait the better: this is supposed of a single hook, though a double one is the same as to the lead and joints of the wire. I commonly made use of the single hook, which strikes as sure as the other. The double hook hath one advantage above the other, that if it meets with such resistance in the water that it loses one side of it, the other part, with a little filing, may be still as serviceable as it was before: it is more troublesome in the water, and more apt to check and take hold of the weeds and roots; it is best for a great bait, for if you put a small and slender bait on a double hook, it will hang out and bear off so much in the bending, that a pike may not only discover the delusion, but if he takes it, it may check him in his feeding, and so hinder him from gorging it. There are two or three sorts of double hooks, besides that of the snap; some are flat, and are bent back to back.

There is another sort that is more sloped, and the bents closer together; others that have a round bent much after the form of the snap, which must always have a full bend and very large. That is baited by fixing the hook in the middle of the bait, and may have the lead fastened to the wire. The way to use it is, to strike soon after the fish bites, and as the pike runs one way to strike the contrary.

In the choice of hooks, you may have some regard to the wire, that it is not rugged or knotty; for if it is not sound and strong, you may lose both your fish and hook. The first joint of it which is next the lead, must be so long that the tail of the bait may not reach over it, for if it does, you cannot well fasten it to the joint, though in time of necessity you may untwist the wire of the upper joint, and there fix the thread. Some baits are short, as roach; some are longer, as dace, bleak, or large gudgeons, which require that the hook and wire be both long and proportionable to it. The joint which is fastened to the line, must be twice or thrice the length of the other; lest when the pike hath gorged the bait deep into his ventricle, the wire is not long enough to reach out of his mouth, and so he cuts the line with his teeth. This joint should be very fine and smooth: if it be rugged, it tears the bait when you put it on. If this is stiff and strong, you need not that which they call the arming-wire to help you to thrust it out of the tail of your bait; you may sometimes search your wire, lest it be faulty or broken, especially the lowest joint, for there it often breaks, and may deceive you.

There are other sorts of hooks for ledger baits; those are used with live fish, and are not leaded: the hook is rather shorter than the others, but the wire hath usually more joints. The lines for these need not be so long as the trolling-line: they are thrown into the water, and so gaged with a stick; for a pike will not so soon take a bait off the ground,

as if it swims about a foot or more from the bottom. The way of fishing with ledger baits is too destructive to be made a common practice, and far below the diversion of a fair fisherman.

The best hooks are those that break and snap rather than stand bent, or the least moved from their first shape. There is a variety in hooks, good and bad: it requires caution to choose the best.

When you fasten the wire to the line, be sure to tie it with a right knot: if your tackle is new and sound, you need not fear to venture among fog or weeds, or any thing but roots and stumps of trees, which may hold play with a cart-rope.

The safest and most secure way of fastening, is first to tie one single knot, and then one that will slip, or else only the slipping knot, allowing it an inch or two of line, then drawing it close, first try it with all your strength before you put it into the water. It is a neat way to fasten it with a swivel, tying it close with a bit of thread; this plays the bait better, giving it a turn when you stir it, which makes it glisten and swim like a live fish.

The Trolling Line.

The line is one of the most necessary members that is required; for an ordinary and indifferent hook may be dispensed with, as also the rod; but if your line is not strong and of a considerable length, you can have but little hopes of success. The best material for a line is green or blue silk,

which cerulean colour is most resembling water. It may be only fancy that one colour is of more consequence than another, yet sometimes pleasing the fancy does so much enliven and encourage the fisherman, that it makes him the more active; and if his fancy diverts him another way, he will take the less care.

Next to silk, the best sort of green thread, though it is neither so handsome nor so durable as silk, yet it may last a year or two; but wears like other things, according to the care and good keeping of the user: for if it is laid up wet and on a heap, as soon as you have done fishing, and take no more care of it, you may rot as many lines as you catch pikes. The best way of preserving it is to wax it sometime with bee's wax, and when it is wet to wind it up loosely in long foldings, that the air may come in to dry it, or else let it dry at length and wind it up in a roll; with such usage, a silk line will last beyond your expectation.

Silk and hair may be mingled in the making of a line; some make them of silk and silver, thinking that way to preserve it: though the addition of silver may be rather to please their fancy and the gaiety of their humour than to keep their line from perishing: such persons should have silver hooks to their silver lines: if it cannot take fish itself in the water, it may take them ready caught, and so be useful in saving their credit.

There are other sorts of course lines very short, not above half the length of the trolling-line, which

are to fish with a ledger-bait, or to lie all night, being tied to a float, and cast into the water.

These are not made of such fine stuff, nor so well twisted as the other, and only serve in some exigencies, as when a pike that will not be invited by trolling, may be better pleased with a bait that is laid for him, he will sometimes so humble himself as to take it off the bottom; but it is the wiser to tie a stick or a cork to the line, that it may hang about a foot or more from the ground, observing the wind, for if you throw it in against the wind, it will drive it backwards, and carry the bait close to the side; and though a pike often harbours by the side, yet the middle has more scope and advantage of drawing him to it; for these laying lines, the worst sort will serve, because lying so long in the water will rot them.

As to the length of the line, it is good to have enough, for though a short line may do in a brook or some narrow place, where the pike must either run up or down, and so you may follow, yet if you come to a broad reach, where the fish runs across the stream to the farther side, you may often lose your pike for want of a few yards of line. If he be the least curbed or stopt in his speedy career, and not have his full swing, he is checked, and leaves his suspicious prey: this I have often found by experience, though my line was long enough; yet, having a knot in it that would not quickly pass, being so entangled I have lost very good fish.

About thirty yards is a good medium for the

pouch, I cannot see any reason why it need be so long at snap; for though they may throw out as far at snap, you strike as soon as he bites, and let him run no further, whereas at pouch he may go as far as you please.

It is true that the line at snap ought to be thicker and stronger, for a sudden jerk may break it: it need not be so long, because that is only for casting in, and a pike will sometimes run farther with it than it can be thrown: so that I have seen those that have fished at snap with no longer line than what was tied to the rod, and so cast it up and down like an angle.

For managing the line; you may wind it upon a roll that turns upon a ring, with your finger in it, having no more in your hand than you make use of, so you may unwind it at your leisure.

Some draw it after them at length, which I approve as a very good way; if there is no impediments, as shrubs or bushes, to interrupt or make them go back; it will be ready to cast out, and you may throw it the farther: if you hold a great deal loose in your hand, it will be apt to knot and entangle. Some object to drawing the line upon the ground, lest it wear out sooner: but it sooner dries, and when it is dry it can take but little harm. Besides a pike will sometimes be so hasty and furious, that he will scarcely give you leave to unwind fast enough; and therefore the surest way to trepan him is to have your line at command, and in complete readiness.

The Rod.

Supposing your hook good, and your line strong, you may make shift with an indifferent rod ; though some are more curious in their tackle and patient in fishing, and will not stir a foot without all the formalities of an exquisite fisherman : such precise craft-masters as these can spend their time in admiring their instruments, and sufficiently delight themselves with the commendation of their own materials. This is certain and undeniable, that the longer the rod is, if it is straight and light, you will find the more benefit in playing the bait and throwing it ; for if there are flags and reeds between the bank and the main deep, you can hardly play your bait with a short rod. I have often put a ring upon my hand-stick, and made use of that instead of a rod, and have had the fortune sometimes to take a pike : sometimes I have taken nothing with me, but confided in the willows that grew next to the place designed for that day's recreation, cutting down as good a stick as I could find, and so making a bent at the end for the line to slip.

In a broad river, or a pond, being at a pinch, I have had no rod, but took the bait in my hand, and cast it from me like a stone to the length of my line, the end I fastened about me. In some places, they fish that way where the river is deep and clear from weeds. I never accustomed myself to a long rod, and I generally made use of an elder as long

as I could get, commonly about three yards long, which I barked and kept dry for lightness and easy carriage : when it was thoroughly dry it was tough and light, that I could scarcely feel it in my hand ; and there is no objection to be made that such a stick is too weak ; for any thing is strong enough at pouch that will play the bait and throw it ; there is no weight or stress upon the rod, and but little upon the line ; if you strike the fish gently and play him slightly and dexterously, you may tire him with a slender line, if it be long, and you can keep him from weeds and roots. At snap, your tackle must be fitted accordingly, your line very strong, and your rod on purpose, of a good ash, withy, or hazel well dried : straight and tough, that it may be able to draw him out by force. With him that uses this way it is scarcely a word and a blow, for the mistaken fish no sooner lays his mouth upon the deceitful bait, than he is brought up into another element. The way of pouch is far more mild and flattering, though equally destructive.

If you use an ash or an hazel rod, you must have a ring fixed to the end : some have two, or more, though I see no necessity for that superfluity. If it be an elder or a cane, or any hollow wood, you may have an iron ring made to screw in at the top, or else that which may be as well, a piece of dry alder that is cut sharp and sloping, about three or four inches long, which you may stick fast in the end of the rod : some have only a ring with a little screw very short. If your rod be of alder, it

will be apt to crack : you may prevent that by binding the end of it hard with a waxed thread, and then you may thrust in the top without any danger of breaking or cleaving the rod.

A dry withy or hazel, bored about twelve or fourteen feet, will make an excellent rod ; which may serve for angling, only putting a top into it, as also at Snap. It is a great ease to have a light rod ; get it the proper season, and let it stand near the fire, or in some dry place for the space of half a year or more ; for if your rod be green and heavy, it will tire you, and be a great hinderance.

How to Bait, and Play the Bait.

Though you are perfectly furnished with all sorts of tools and instruments that are required to make a fisherman, yet if you know not how to use these impliments, you will be soon weary, and despair of learning the Art of Trolling. Provided then your baits are ready, take a couple of hooks at least with you ; you may bait them before you set out, especially if the weather is cold, that it may not trespass on your patience when you come to the river.

The way, then, to bait your hook is, first to thrust your wire into the mouth of the fish, quite through the belly and out at the tail. Some have, besides the running wire, a needle on purpose, but if the first joint of your wire is stiff and strong, it may be done with that : the point of the hook must be

even with the belly of the bait ; for if it hang on either side, it may hinder and check the pike, who will probably lay his mouth upon it : for when his chops cross the fish, he may be pricked, and so leave the bite : when you have put it through the fish, then tie the tail of the bait fast to the joint of the wire with strong thread, which will both make it hang straight upon the hook, and preserve it from outward violence ; for if it is not well-fastened, the weeds will have so much power over it, that they will soon tear it down to the gills, and separate the hook from the bait : some fasten it with a needle.

The best way of fixing your hook to the line is with a swivel, which if you have not, you may make it fast with a slip knot, which you may untie without cutting your line.

When you are thus prepared for your intended sport, drop in your bait before you, then cast it on each side, and let the third throw be before you into the middle ; afterwards cast about all places where you think your game lies, or any where that you can fish without annoyance ; for a pike often delights in a very unlikely and improbable harbour ; and therefore the surest way to meet with him is to fish true and close ; missing as little of the river as you can, which though it is tedious, yet it is the only way to search and see what store of fish a river affords, and you may often have a bite, when you think least of it.

The farther you throw in your bait, the more advantage you gain, and the more hopes of a bite,

provided there is no impediment in your way, as weeds roots, and the like ; for if the place is foul and weedy, you cannot make out so far, but only drop in your bait here and there, by the sides and in holes that are clear and deep.

The weeds are bad enemies to the bait and hook ; though a good hook, and a line answerable to it, will pull up the strongest. I cannot remember that I ever lost a hook by a weed alone, except it had some stump or root of a tree to assist it. Candocks indeed, and bull-rushes, will disfigure and annoy your bait, and almost discountenance a young undertaker ; for if the smallest bit of weed hang upon the hook, a pike will be very squeamish to gorge it ; though some affirm that he feeds upon a weed one time of the year, which they call pickerel-weed.

Supposing that you have cast out a fair throw a dozen or twenty yards, which may easily be done if the river requires it, let it first have a little time to sink, then feel it and draw it gently towards you ; for a pike often takes it at the first sight, before it gets to the bottom, and if you snatch it hastily, you may discourage him and be deprived of your sport. After you have given it an easy motion towards you, let it have the liberty of sinking again, then draw it slowly and softly, for if you jerk it too quickly and hastily, you will not allow him to lay hold of the bait ; for he will often shoot from the farthest sides, at a great distance, being so quick-sighted in the water. When you have got your bait near the

bank, then play it longer there : first deep, for the deeper you fish the better, especially in cold weather ; afterwards raise it higher and higher, by degrees, till you see it, and then you may often have the pleasure of seeing him take the bite.

There are indeed some sort of weeds and the stream together, which may often give encouragement by promising sport and performing none : they will sometimes so exactly imitate a real bite, that even an old and experienced fisherman may be mistaken. The best way then to be sure, is to pull your line gently till you come to feel it, and if it be a fish, the moving of the bait will make him more eager, he will then strike out and gorge it ; whereas if it lies still, he would very probably leave it. When you have raised your bait so high towards the top, within two or three feet, that you can perceive it glisten, you may then comfort yourself with the hope of a pike that may rise at it, as he often does, and therefore it is not prudent to be too hasty in taking out the bait.

When a pike is once stirred, he will lie as it were watching for the bait, and catch greedily at it, if he does not see you ; therefore you must be careful to keep a little distance from the bank, for they will often take it at the very top, and sometimes leap out of the water at it ; but they are then commonly so frightened that they will not be courted to bite any more. You may fish as close as you will, though it is not material whether you throw two or three times in one place ; for he is so voraci-

ous, that he usually embraces the first opportunity to lay hold.

Some troll with great corks and floats : it may do best with the ledger-bait, though I never approved of that way ; for the weeds will make the float dance exactly as a pike, except he bite very greedily, and so you may often be deceived ; sometimes, I grant, you may distinguish and be sensible of your bite, if he runs, especially up the stream ; but if he goes downwards and bites slowly, you cannot assure yourself whether it be a fish or a weed. If a place be free from weeds, you may make a good shift with a cork ; though you may be often mistaken when you lay a little too deep, for the hook will draw along the bottom, and appear like a bite.

In some places, they troll without a rod, or playing the bait, as I have seen them throw a line out of a boat, and so let it draw after them as they row ; but that must be a careless and unsafe way, for though they may have bites and offers, yet it must certainly check the fish so much that they will never pouch it.

Baiting the hook with a frog I spoke nothing of, because I never made that any part of my practice. Some frogs are thought to be venomous, as the land-frog, or that which breeds by land : it is observed by some, that a pike hath an antipathy against it ; and of these there are several sorts, some speckled, some greenish, which are the most dangerous to touch ; these breed by slime and dust

of the earth, which turn to slime in Winter, and in Summer to a living creature. Carden gives a reason for the reigning of frogs, which proceed from putrefaction, and are not supposed to be that sort of frogs which engender in February or March, and breed in ditches by slime and blackish eggs. If you intend to troll with a frog, you must choose the yellowest you can get.

Put the arming wire in at his mouth and out at his gills, and then with a fine needle and silk sew the upper part of his leg with only one stitch to the arming-wire, or tie the frog's leg to the upper joint of the wire ; use him gently and he will live the longer : when you have thus baited, you may fasten your line to a bough, a bunch of flags, or a bundle of straw, and by the help of the wind they will cross a pond or mere. Some will tie four or five live baits to bladders, and let them swim down the river, whilst they walk softly along the shore ; others will fasten baits to ducks and geese, and so let them swim about the pond ; if there is store of pikes you may see excellent sport this way, for sometimes a great pike will draw a duck under the water.

How to Strike a Pike and Land him.

When you have diverted yourself as long as you think proper, and can guess by the running of the pike, what progress he hath made in his

repast, by his ranging about for more; you may then hook him with a gentle jerk, and so take your fill of sport: for though we say of a pike as of a thief, give him rope enough and he will hang himself, yet a fine gentle stroke will do no harm, but secure him. Supposing then that he has fed a little, you may observe what motion he makes: if he take the bait greedily at bottom, and marches up the stream with it, or strikes across the river towards his hold, he will then probably lie still a little, while he is pouching, as you may feel him check and tug; if he goes quick, you may let him alone a little longer; you may lose all for want of two or three minutes patience. If he hath lain still awhile the second time, and then runs with it, you may let him go if you have a desire to prolong the sport; if not, you may draw your line straight, and with your rod give him an easy stroke, and so feel him by degrees till you come to see him; but if he makes resistance and is very furious, let him have line enough and give him his full swing: he will be very angry at first, till he is better pacified by losing his strength.

As soon as you strike him, you may conjecture of what bigness he is, for if he is large, you will find him strong and unruly in the water; but if small and light, you can scarcely tell whether you have any thing or not; or perhaps he may (for madness) leap out of the water as soon as he is pricked. If he is a good one, as I say, you may either see or feel him,

and you must be very cautious and take great care and diligence in getting him to shore. If the river is broad and your line short, you may lose him: he will launch out with such extremity and violence, that though he cannot break the line, yet he will tear his own entrails if he is there hung.

Now if a fish takes your bait at the top of the water, and runs fiercely with it in the deep, and there lies still for some time, and you perceive that he does not pouch it, your remedy for that is to stir him a little, to make him run and be more eager; then after he hath lain still and runs with it again, there is no great danger of losing that fish. When he leaves it he commonly throws it up, that is the first time he lies still. Sometimes he will take it again after he hath left it, and runs to his hold, and play with it more than he did at first, shewing very good sport for a while, and after all leave you in the lurch. A fish that takes it greedily at the beginning, and carries it the farthest, does, notwithstanding, often forsake it; as the proverb says, *nil violentum est diuturnum*—so a pike that bites so eagerly at first is not so at last; for it happens that he often leaves it; the only way to be even with such a fish is to take the snap, and that may chance to stop his career.

Now when you have a bite, and the fish goes down the stream, we are apt to conceive it is a small jack; but on the contrary, if he sails slowly upwards with the bait, it is a sign of a good one; for the greater sort bite more calmly and moderately than the less: for the latter snatch, and away with it without any

care or deliberation ; while old fish are more wary and cunning, they are sooner taken with a line laid them all night than by trolling. It is sometimes difficult to know what size a pike is before he is struck, and therefore there are none but may be mistaken in their conjectures ; for an indifferent fish, I mean about twenty or twenty-two inches, will often make as good sport as one twice as big, before you strike him ; but then, generally the bigger the pike is the more sport. Sometimes he will take the bait very hastily, and run out to the length of your line, and never lie still, but will play up and down with it, till you think fit to strike him.

When the water is clear and not very deep, you may see him rise and take it ; so you may see the bait glisten as it lies across his mouth ; you may then see when he hath pouched, and know your time to strike.

When you have first struck him, you must be sure to have your line ready and slack, that he may take as much liberty as he will : for when he finds himself hooked, he will use all his might and cunning to get away. As you feel him come easily towards you, you may be still drawing, till you feel him make resistance, then you may let him have his swing, till the heat of his fury is over ; gather your line to you, till he starts away, and if you can get him to the top, it will the sooner tire him. The more he strives and throws himself from you, the sooner he will be weary : after this manner, by drawing him up and letting him run, you may tire and

tame him, till you bring him to your hand ; then he will lie as quiet as if he was dead.

If you have hung him in the gills, you cannot lose him, though you pull him out by mere force, but if either in his gorge or his throat, he may deceive you, though he destroys himself, leaving you part of his guts on the hook, and dying soon after of his wounds. When you have brought him to the bank, you will find something to do before you can call him your own ; for if you go unadvisedly to take him out, either by the back or the tail or any part of his body, though you think his best is past, and his dancing days are done, he may give another leap when you do not expect it. The best way, then, is to use fair means, and invite him to the land by persuasion, not by compulsion, taking him by the head, and putting your fingers into his eyes, which is the fastest hold.

If the water is low, so that the bank rises some distance from it ; you must not fear catching an ague, by laying your belly level with the ground ; if you have no contrivance to guide him to a more commodious place. Some will adventure to take him by the gills, though that hold is neither so secure nor so safe ; because the fish, in that heat of passion, may take revenge upon his adversary, by letting him blood in his fingers, which way of phlebotomizing is not so good, some being of opinion that the teeth of a pike are venomous, and that those wounds are very difficult to be healed.

If there are reeds and shallows between you and the deep, or if the river is in such ebb that you cannot reach to lay hands on him ; you must contrive some other means to conduct him to a more convenient landing. Have an eye to that when you first strike him, looking up and down for the best advantage ; if it is all along weedy, as it is commonly in ponds or meres, that you have no convenience to bring him to your hand, you must then be content with hopes of success, by committing yourself to the hands of fortune, having nothing to trust to but that which you may call fisherman's luck. If you have debilitated his strength and tired his patience, you may probably draw him out with no great resistance, if the weeds be not too strong and friendly to him.

Those that are more nice, have their net ready by them : this net is made in the fashion of a little sparrow-net, with a long trail and a pole at it : this is a delicate way of trolling : such as use it must have their attendants to assist them ; that, as the Philosopher said, *omnia mea mecum porto*. They will have their servitors to carry their implements and tools : these are of more power on shore than in the water, and have more authority to command their retinue by land, than the fish in the water.

CHAP. XIII.—*How to Preserve a River for Trolling.*

THE way to preserve a river is to secure it from all enemies that are hurtful and destructive to it. The first and greatest, which may be called the arch-enemy, is the drag-net, which is as unmerciful as an epidemical disease that sweeps all before it ; or as a greedy and covetous monopolizer that engrosseth all in his own possession, and so verifies the old proverb, that all are fish that comes to net. Some there are that commend the following of the drag, to troll immediately after it ; these love to fish in troubled waters, for they say the dragging the river stirs up the fish, and makes them the more ready to catch at their prey. I cannot applaud the practice, nor judge it any way reasonable, for though it is a hard battle where none escapes, and the drag, like an universal distemper, cuts off the major part, still there will be some left to renew their species, which, after a short time, will multiply and replenish the waters.

Another enemy to the sport is the bow-net, though more favourable and sparing, and of a far lower class than the drag ; yet it is more dangerous, being private and undiscovered. For the drag is a professed and a public foe, which gives some notice to avoid those places it hath lately cleansed ; but the bow-net is so close and secret a murderer, that it slays and leaves no visible wound.

Another plea there is that might be alleged for the drag; that it is seldom used above once, sometimes not so often as once, a year; but the bow-net kills and destroys, spoils and plunders all the year: the spring-time indeed is the fittest for it, when the fish run and get into the scours, or else immediately after a flood; to lay many of these in small rivulets and ditches, they that use them may then make their harvest after a spring-flood.

The third enemy is the stall or trammel; a net which is made up of great meshes, as it is so much the more allowable, because it holds only the great fish, and give the less leave to escape. This net is not so common, nor so much condemned as the bow-net, because it is usually assisting the drag. In washes and back dykes it may do service, because there they may both draw it, and plunge on both sides; in the main river it can do no great execution, but only set as a stall to stop the fish. In one respect it is very murdering, because the meshes are made alike on both sides, that it takes the fish which ever way they come. They that use this sport, have commonly two to set at a little distance and then they meet, and take most that are between them.

As to the cast-net, it is rather a friend, and subservient to the troll, than an enemy to the sport. There is no way so good to take baits as with it; because out of a multitude of fish which it takes, you may have your choice of baits. An angler indeed

may make a shift sometimes in summer, but that often takes either those that are too little or too big baits.

A cast-net, to take small fry, to feed pikes in a pond, is necessary and beneficial many ways. Those that use it as destructively as they can, cannot revenge themselves much upon the pikes ; they may kill many small jacks with it in the shallow streams, but the great fish that lie deep and close, are too secure from the narrow compass of a cast-net. It may by chance fall upon a great one, yet if there are any weeds or fog in the place, and the net is not strong and well bulleted, and the caster very weary in drawing it up, the pike will deceive his expectations. In a clear place, where there are no impediments or obstructions, and the bottom smooth and level, it may inclose and draw up a good pike ; but where there are the least incumbrances to annoy the net, it is to be supposed the fish will make his escape. The new sort of nets that are hung with chains instead of bullets, are too light for this service.

Next to the nets which kill by wholesale, the trollers are often the greatest enemies one to another, especially in the way of ledger bait, which is very destructive, for that enticing way which they use with a live bait, and laying such an army of hooks, must weaken the forces of the watery militia.

Dead baits are not so pernicious, yet if they are too often used, they will diminish the fish ; for at

some seasons of the year, they will bite till there are scarcely any left in the place: the way to favour it is to be moderate, and not bait a river too much, or with too many hooks; to fish more for pleasure than profit, and to come but once or twice a season to the same river.

The snare may do harm at the beginning of the year on a sunny day and a clear water, that is only for by-places and narrow scours.

One of the greatest enemies is the water-dog, or otter; he will walk five or ten miles to a pond in a night. He can smell fish above an hundred yards, and then he devours them, and spoils more than he eats, leaving the head and great part of the back untouched. There are so many of them in a river in Cornwall, that Camden says the name of it is called Ottersey, from the abundance of otters that breed and are fed in it. Though this amphibious creature is chief regent, and is triumphant in the water, yet the greedy and audacious pike will sometimes set him at defiance, and give him battle; as some have seen, that a pike hath fought with an otter for a carp he had got.

It would not be amiss, for the conservation of the waters, to keep the fence months, which are three at the Spring in spawning time; for if taking the dam on her nest when she hatches her young, is a sin so much against nature, that it was forbidden in the old law, certainly the taking fish in the time of their spawning, is unlawful as well as unnatural.

Besides such unnatural Fishermen and all the ene-

mies mentioned, the fish have many more, as the bittern, the cormorant, the osprey, the seagull, the heron, the kingfisher, and many others; which though they dare not attack the great luce or pike, yet they lessen the small fry which should feed and sustain the greater: sometimes they may devour young jacks and pickerel.

in the morning, the fish have many more, as the
bait, the current, the spray, the rearing, the
honor, the kingfisher, and many others; which
though they do not attack the great fish in the
net they lessen the small fry which should feed and
sustain the greater: sometimes they may destroy
young fish and eggs.

It is not only the fish which are taken, but the
water is also polluted by the bait and the fish.

The fish which are taken are also taken in the
net, and the water is also polluted by the bait and
the fish. The fish which are taken are also taken
in the net, and the water is also polluted by the
bait and the fish. The fish which are taken are
also taken in the net, and the water is also
polluted by the bait and the fish. The fish which
are taken are also taken in the net, and the water
is also polluted by the bait and the fish. The fish
which are taken are also taken in the net, and the
water is also polluted by the bait and the fish.

The fish which are taken are also taken in the
net, and the water is also polluted by the bait and
the fish. The fish which are taken are also taken
in the net, and the water is also polluted by the
bait and the fish. The fish which are taken are
also taken in the net, and the water is also
polluted by the bait and the fish. The fish which
are taken are also taken in the net, and the water
is also polluted by the bait and the fish. The fish
which are taken are also taken in the net, and the
water is also polluted by the bait and the fish.

SUPPLEMENT.

SUMMARY OF THE LAWS RESPECTING FISH AND PRIVATE FISHERIES.

I. *Of ponds and other private fisheries, and the protection of the fish therein.*

THERE is scarcely a considerable river in the kingdom in which the fish are not protected by one or more local statutes, but more especially the Thames and the Severn; but not being of general interest, they are, for the most part, wholly omitted here, excepting such as are declared to be *public acts*, and they are shortly abstracted.

NO less than six statutes have at different periods been passed, wholly, or in part, for the protection of private fisheries; four of them, at least, specifically subjecting offenders to conviction before justices. The last of these, however, is the only one which awards a punishment in any degree adequate to repressing the evil by summary process, and the niceties required in informations and convictions under that statute have been the occasion of an extraordinary number of prosecutions having failed.

By 3 *Ed.* 1. c. 20. "If any trespassers in ponds (*i. e.* those who try to take fish therein, 2 *Inst.* 200.) be thereof attainted at the suit of the party, great and large amends shall be awarded according to the trespass, and they shall have three years imprisonment, and after shall make fine at the king's pleasure (if they have whereof), and then shall find good surety that after they shall not commit the like trespass.

And if they have not whereof to make fine after three years imprisonment, they shall find like surety; and if they cannot find like surety, they shall abjure the realm. And if none sue within the year and day, the king shall have the like suit."

By 5 *El.* c. 21. § 2, 6. "If any person shall unlawfully break, cut, or destroy any head or dam of a fish pond, or shall wrongfully fish therein, *with intent to take or kill fish*, he shall, on conviction, at the suit of the king or of the party, at the assizes or sessions, be imprisoned three months, and pay treble damages, and after the three months expired shall find sureties for his good abearing for seven years, or remain in prison till he doth."

By 22 and 23 *Car.* 2. "Whereas divers idle, disorderly, and mean persons betake themselves to the stealing, taking, and killing of fish out of ponds, pools, moats, stews, and other several waters and rivers to the great damage of the owners thereof, it is enacted, that if any person shall use any net, angle, hair, noose, troll or spear, or shall lay any weirs, pots, fish-hooks, or other engines, or shall take any fish by any means or device whatsoever, or be aiding thereunto, in any river, stew, pond, moat, or other water, *without the consent of the lord or owner of the water*, and be thereof convicted by confession, or oath of one witness, before one justice

in one month after the offence, every such offender so stealing, taking, or killing fish shall, for every such offence, give to the party injured such recompence, and in such time, as the justice shall appoint, not exceeding treble damages; and moreover shall pay down to the overseers for the use of the poor such sum not exceeding 10s. as the justice shall think meet: in default of payment to be levied by distress; for want of distress to be committed to the house of correction not exceeding one month, unless he enter into bond with one surety to the party injured not exceeding 10*l*. never to offend in like manner." § 7.

"Persons aggrieved may appeal to the next sessions, whose determination therein shall be final, if no title to any land, royalty, or fishery, be therein concerned.

And the justices may take, cut, and destroy all such angles, spears, hairs, nooses, trolls, weirs, pots, fish-hooks, nets, or other engines wherewith such offenders shall be apprehended." § 8, 9.

By 4 and 5 *W. 3. c. 23.* "Whereas divers idle, disorderly, and *mean persons* have and keep nets, angles, leaps, piches, and other engines for the taking and killing of fish out of the ponds, waters, rivers, and other fisheries to the damage of the owners thereof, therefore no person hereafter shall have or keep any net, angle, leap, piche, or other engine for the taking of fish, other than the makers and sellers thereof, and other than the owner or occupier of a river or fishery, and except fishermen and their apprentices, lawfully authorized in navigable rivers. And the owner or occupier of the river or fishery, and every other person by him appointed, may seize, detain, and keep to his own use every net, angle, leap, piche, and other engine which he

shall find used or laid, or in the possession of any person fishing in any river or fishery, without the consent of the owner or occupier thereof. And also any person authorized by a justice's warrant may in the day-time search the houses, outhouses, and other places of any person hereby prohibited to have or keep the same, who shall be suspected to have or keep in his custody or possession any net, angle, leap, picche, or other engine aforesaid, and seize and keep the same to his own use, or cut or destroy the same, as things by this act prohibited to be kept by persons of their degree."

By the Black act, 9 G. 1. c. 22. "If any person being armed with any offensive weapon, and having his face blacked or otherwise disguised, shall unlawfully steal or take away any fish out of any river or pond, or shall unlawfully and maliciously break down the head or mound of any fish pond *whereby the fish shall be lost or destroyed*, or shall forcibly rescue any person lawfully in custody for such offence, or by gift or promise of money or other reward, procure any other of his majesty's subjects to join with him therein, he shall be guilty of felony without benefit of clergy."

By 5 Geo. 3. c. 14. "If any person shall enter into any park or paddock fenced in *and enclosed*, or into any garden, orchard, or yard adjoining or belonging to any dwelling-house, in or *through which* park or paddock, garden, orchard, or yard, any river, or stream of water, shall run or be, or wherein shall be any river, stream, pond, pool, moat, stew, or other water, and by any ways, means, or device whatsoever, shall take, kill, or destroy any fish *bred, kept, or preserved therein*, without the consent of the owner thereof, or shall be aiding or assisting therein, or shall receive or buy any such fish,

knowing the same to be so *stolen* or taken as aforesaid, and shall be convicted thereof at the assises within six calendar months after the offence committed, he shall be transported for seven years.

And if any person shall take, kill, or destroy, or attempt to take, kill, or destroy any fish in any river or stream, pond, pool, or other water (not being in any park or paddock, or in any garden, orchard, or yard adjoining or belonging to any dwelling-house, but *in any other inclosed ground*, being private property) he shall *on conviction before one justice*, on the oath of one witness, forfeit 5*l.* to the owner or owners of the fishery of such river or stream of water, or of such pond, pool, moat, or other water. And such justice, on complaint upon one oath, may issue his warrant to bring the person complained of before him; and if he shall be convicted before such justice, or any other justice of the county or place, he shall immediately after conviction pay the said penalty of 5*l.* to such justice for the use of such person, as the same is hereby appointed to be paid unto, and in default thereof shall be committed by such justice to the house of correction for any time not exceeding six months, unless the forfeiture shall be sooner paid; or such owner of the fishery may bring an action for the penalty (within six calendar months after the offence) in any courts of record at *Westminster*. § 3, 4.

Provided, that nothing in this act shall extend to subject any person to the penalties thereof who shall fish, take, or kill, and carry away any fish in any river or stream of water, pond, pool, or other water wherein such person shall have a just right or claim to take, kill, or carry away such fish." § 5.

II. Regulations for preserving the breed of fish.

The following rivers are protected, as to the breed of fish, especially salmon, by one or more local statute or statutes :

By 13 *Ed.* 1. c. 47, the *Humber, Ouse, Trent, Don, Aire, Derwent, Wharf, Nid, Yore, Swale, Tees, Tyne, and Eden.*

By 13 *R.* 2, the *Thames, Humber, Ouse, Wyr, Mersey, and Rybbyl.*

By 17 *R.* 2, c. 9, the *Thames and Medway.*

By 1 *Geo.* 1. c. 18, the *Severn, Dee, Wyne, Teame, Were, Tees, Rybbyl, Mersey, Dun, Air, Ouse, Swale, Calder, Wharf, Eure, Derwent, and Trent.*

By 43 *Geo.* 3. c. 61, the *Teign, Dart, and Plym.*

By 45 *Geo.* 3. c. 33, the rivers in the county and boroughs of Caermarthen.

The general acts are as follow.

By 9 *Hen.* 3. c. 23, which prohibits all weirs being put down throughout all England, except by the sea coast ; which act was confirmed by 12 *Edw.* 4. c. 7. See 7. *E. R.* 195.

By 2 *Hen.* 6, which prohibits any nets fastened over rivers standing " continually day and night," on pain of forfeiting 100s. to the king,

3. By the 1 *El.* c. 17, " no person, of what estate, degree, and condition soever he be, shall take and kill any young brood, spawn, or fry of fish, nor shall take and kill any salmon or trouts, not being in season, being kepper or shedder, nor any pike or pickerel not being in length ten inches fish or more, nor any salmon not being in in length sixteen inches fish, nor any trout, not being in length eight inches fish, nor any barbel not being in length twelve

inches : and no person shall fish to take fish by any device, but only with net or trammel, whereof the mesh shall be two inches and a half broad (angling excepted, and except smelts, loches, minnies, bull-heads, gudgeons, and eels,) on pain of forfeiting 20s. for every offence, and also the fish, nets, and engines."

And the conservators of rivers may inquire hereof by a jury, and in such case they shall have the fines § 6, 7.

The leet also may inquire hereof, and then the forfeiture shall go to the lord. And if the steward do not charge the jury therewith he shall forfeit 40s. half to the king, and half to him that shall sue. § 8, 9, 10.

And if the offence be not presented in the leet within a year, then it may be heard and determined at the sessions, or assizes. (Saving the right of the conservators.) § 11.

By 13 *Jac.* 1. c. 12. every person who shall erect or set up any new weirs along the sea shore, or within five miles of any haven, harbour, or creek, or shall willingly take, destroy, or spoil, any spawn, fry, or brood of sea-fish, in any weir, engine, or device whatever, shall forfeit for every time so erecting, &c. the sum of ten pounds, half to the king, and the other half to him who will sue. § 2.

And every person who shall in such places fish with any drag net or draw net under three inches meash, or with any net with canvass or other engine, whereby the spawn, fry, or brood, of sea-fish may be destroyed, shall forfeit such net, and also for every time so doing, 10s. one half to the poor of the parish, and the other to him who will sue for the same ; to be levied by distress by one justice.

By the 33 *G.* 2. c. 27, "no person shall take, or

knowingly have in his possession, either in the water or on shore, or sell or expose to sale any spawn, or brood of fish, or any unsizeable fish or fish out of season, or any smelt not five inches long, and any person may seize the same, together with the basket and package, and charge a constable or other peace officer with the offender, and with the goods, who shall carry them before a justice, and on conviction the same shall be forfeited and delivered to the prosecutor, and the offender shall besides forfeit 20s. to be levied by distress, by warrant of such justice and distributed, half to the prosecutor, and half to the poor of the parish where the offence was committed (and any inhabitant of such parish, nevertheless, may be a witness) : for want of sufficient distress to be committed to the house of correction, to be kept to hard labour for any time not exceeding three months, unless the forfeiture be sooner paid. Provided, that the justice may mitigate the said penalty so as not to remit above half. Persons aggrieved may appeal to the next sessions.

By stat. 58 Geo. 3. c. 43. § 1. "For preventing the destruction of the breed of *salmon* in the rivers of England," after reciting that "whereas provision has been made, in various acts of parliament, for preventing the destruction of salmon, and other fish of the salmon kind, in the several rivers in England named therein, and in estuaries and arms of the sea near the mouths of the said rivers ; and it would be of great public advantage if such protection should be afforded generally in all rivers throughout England ;" it is enacted, "that it shall be lawful for the justices assembled at any general or quarter sessions of the peace, from time to time to appoint conservators or overseers for the preservation of the salmon, and fish of the salmon kind, and the brood,

spawn, and fry thereof, and preventing the destruction thereof, and enforcing for that purpose the provisions of this act within the limits of the jurisdiction of such justices, and within the limits of which they shall be so appointed."

§ 2. Where no provision is made by any act now in force for limiting the times within which it shall be lawful to take salmon, or fish of the salmon kind, in any of the rivers in England, it shall be lawful for the justices acting for the several counties, at their several quarter sessions of the peace, and they are hereby required at the request of any person, such person having first given notice, in some newspaper usually circulated within the county, of his intention to apply to the said quarter sessions in that behalf, to fix certain days, not exceeding 150 days in each year, for each river within their respective counties, to be fence days for the several rivers respectively; during which time it shall not be lawful for any person whatever to take, kill, or destroy, or attempt to take, kill, or destroy, any salmon, or salmon trout, or fish of the salmon kind, or any brood, spawn, or fry, of such fish; and the said justices are further empowered, at any general quarter-sessions, to vary annually the number of such days, and the periods at which they shall commence.

§ 3. If any person shall at any time hereafter pursue, take, kill, or destroy, or seek or endeavour to take, kill, or destroy, pursue, hurt, or injure, any salmon or salmon kind, by laying or using any hot lime or filth, or material or drug pernicious to fish, or using any water in which any green lint or flax has been steeped, or letting off stagnated water, or any water impregnated with any material or drug pernicious to fish; or if any person shall use or employ any such means as aforesaid, or use any fire or

light or white object, or lay down any kind of net, engine, or device, or wilfully do or cominit, or cause to be done or committed, any act whatsoever in any river, water, rivulet, stream, mill, dam, mill sluice, cut, pool, or pond communicating therewith, for the destruction of the brood, spawn, or small fry of salmon therein (angling excepted) : or if any person shall hereafter make, erect, or set any bank, dam, hedge, or stank, net or nets, or place any fire or fires, light or lights, or any white object or objects, so that the young fry, or young salmon be prevented from going down from such rivers, rivulets, or other waters communicating therewith, as aforesaid, or any of them, every such person shall for every such first offence forfeit any sum not exceeding ten pounds not less than five pounds, and for every second and subsequent offence any sum not exceeding fifteen pounds nor less than ten pounds, at the discretion of the justice before whom the offender shall be convicted, and shall also forfeit all the fish, spawn, brood, or fry so taken, and all the nets, weapons, lines, instruments, boats, devices, or things used in the taking thereof.

§ 4. No person shall, at any time after 1st September 1818, take kill or destroy, or knowingly have in his or her possession, either on the water or on the shore, or shall bring to shore, or cry or carry about, sell, offer, or expose to or for sale, or shall exchange for any goods, matter or thing, any spawn, fry or brood of fish, or any unsizeable fish, or any kepper or shedder salmon, being unseasonable salmon commonly called *old salmon*, or any salmon caught in any river during the periods when fishing for salmon is prohibited under the provisions of any law now in force, or when the same shall be prohibited by any order to be made by the justices at their

sessions as herein-before provided; and it shall be lawful for any conservator or overseer thereof, or any other person, under the authority of this act, to take and seize all or any such spawn, fry or brood of fish, or such other fish as aforesaid, wherever the same shall be found, together with all baskets and package in which the same shall be so found or taken, and to deliver the person on whom the same may be found to a constable or other peace officer; and after every such seizure shall be made, the spawn, fry, or brood, or other fish as aforesaid, together with the baskets and package in which the same shall be so seized, shall be delivered into the hands of some constable or other peace officer; and every such constable or other peace officer is hereby authorized and required to take every such offender with whom he shall be so charged for any such offence into his custody, and also the spawn, fry or brood of fish, and such other fish as aforesaid, and all baskets and packages in which the same shall be so seized, and which shall be delivered to such constable or other peace officer, and to carry such offender, and all such spawn, fry or brood of fish, and all such other fish as aforesaid, together with the baskets and package, with all convenient speed, before some justice or magistrate of the county, city, or place where the offence shall be committed, for such offender to be dealt with according to law; and on the conviction of any such offender for any such offence, before any such justice or magistrate, every such offender shall forfeit all such spawn, fry or brood of fish, unsizeable fish and fish out of season, which shall be so seized, together with all baskets or package in which the same shall be so seized; and all such spawn, fry or brood of fish, or such other fish, together with such baskets and package

in which the same shall have been so seized, shall, by order of the justice before whom the same shall be so brought, be delivered to the person who shall have so seized the same, and shall prosecute to conviction any such offender; and every offender who shall be so convicted of any such offence, shall besides forfeit for every such offence any sum not exceeding 10%.

§ 5. Nothing herein contained shall extend to legalize, nor to demolish, take away or destroy any net, fish lock, coop, bay or other work, which shall have been or may hereafter be lawfully erected, put, placed, fixed or used in any such arm of the sea, or estuary or mouth of any river, or in or upon any bank, sand or shore thereof, or near thereto, or in or near any river, rivulet, brook, stream, pond, pool, or other water, mill-lead, mill-dam, sluice, or cut, which runs into or otherwise communicates therewith, or to the present modes or methods used for taking and killing fish therein, other than and as are in this act particularly prohibited.

§ 6. Every the pecuniary and other penalties and forfeitures by this act imposed may be sued for, recovered, and adjudged, and every offence against this act heard and determined, by and before any one or more justices of the peace or magistrate for the county, shire, division, city or place wherein any offender against this act shall be or reside, or wherein or near to which the offence shall be committed, upon the oath or affirmation of one witness, or by the confession of the party: which oath or affirmation, every such justice and other magistrate is hereby empowered to administer; and in case any person who shall be convicted of any offence against this act, and shall not immediately upon such conviction pay down the penalty, together with such

costs, into the hands of the justice or magistrate, before whom he shall have been so convicted, or other person authorized to receive the same, in order that the same may be distributed according to the directions of this act, it shall be lawful for any such justice or magistrate to order any constable or other peace officer to take the charge of and keep in custody any such person so convicted; and immediately thereupon every such justice or magistrate is hereby authorized, empowered and required to grant his warrant in due form of law, and thereby commit every such offender to the common gaol or house of correction for the county, shire, division, city, or place for which such justice or magistrate shall act, for such time herein-after mentioned, unless the said penalty and costs shall be sooner paid; or otherwise such justice or magistrate may grant his warrant in due form of law, to levy and recover the said penalty and costs by distress and sale of the offender's goods and chattels; and all penalties and forfeitures which shall be so paid or levied, shall from time to time be paid, applied, and disposed of as follows; (that is to say), one moiety thereof to the informer, and the other, after defraying all costs, charges and expenses attending the prosecution, and the levying and recovering of the penalty, to the overseers of the poor of the parish or place where the offence shall have been committed; and the overplus of the money levied remaining (if any there be), after any penalty, and all costs, charges and expenses attending the levying and recovering thereof are deducted, which costs, charges, and expenses shall always be ascertained by the justice or magistrate before whom any such offender shall be convicted), shall, on demand, be returned to the owner of the goods so distrained; and in case suf-

ficient distress shall not be found, or such penalty and cost shall not be immediately paid, then it shall be lawful for any such justice or magistrate, and he is hereby authorized, empowered, and required, for the first offence to commit every such offender to such gaol or house of correction for any time not exceeding four months nor less than two months, for the second offence any time not exceeding eight months nor less than six months, and for the third and every other offence, for any time not exceeding twelve months nor less than eight months, there to be kept at hard labour, and be and remain without bail or mainprize.

§ 7. It shall be lawful for any justice or magistrate, upon information being made to him upon oath against any person who shall offend against any thing contained in this act, to grant his warrant to apprehend any person so offending, and cause such offender to be brought before him, or some other such justice or other magistrate; or it shall be lawful for any such justice or magistrate, upon any information made without oath, to grant his summons against the party charged with any such offence, or for any witness to prove any such offence; and if any such person who shall be duly summoned shall neglect to appear at the time and place appointed by such summons, every such justice or magistrate may, upon oath being made of the person being so duly summoned, grant his warrant to apprehend and bring before him or some other such justice or magistrate, the party who shall neglect to appear, and such justice or magistrate shall inquire into, hear, and determine the matter of every such offence in a summary way.

§ 8. No owner, farmer, or occupier of, or any persons otherwise interested in any fishery or right

of fishing in any arm of the sea, river, or other water aforesaid, shall be deemed an incompetent witness to prove any offence committed against this act, by reason of his or her being such owner, farmer, or occupier.

§ 9. Every pecuniary penalty or forfeiture imposed by this act may be recovered, in a summary manner according to the provisons of this act, or may be sued for and recovered, together with full costs of suit, by and to the only proper use and behoof of any person who shall inform or sue for the same in any court of record at Westminster, by action of debt, bill, plaint, or information, wherein no essoign, wager of law, nor more than one imparlance, shall be allowed.

§ 11. Where any offender shall be punished for any offence by virtue of this act, such offender shall not again be prosecuted nor incur any penalty by virtue of any other law or statute now in force, or be liable to any other punishment for the same offence.

§ 12. Every person who shall think himself aggrieved by the judgment of any justice of the peace or magistrate in any of the cases aforesaid, may appeal to the justices of the peace for the county, shire, division, city, or place where such judgment shall be given, at the then next or next but one general quarter sessions of the peace; but no such appeal shall be received, heard, or determined, unless the appellant shall within ten days next after such judgment, and twenty days at the least before the holding of such sessions, give and leave in writing, as well at the public office of the clerk of the peace for such county, shire, division, city, or place where such person or persons shall be convicted, as to the person or at the dwelling house of the informer

or prosecutor, of his intention to bring such appeal, and shall also enter into a recognisance before such justice, in such sum as any such justice of the peace shall think fit, not exceeding twenty pounds, conditioned to try such appeal, and likewise to pay the costs of such appeal, in case judgment and sentence shall upon the hearing thereof be given against the appellant, within ten days next after the determination thereof; and the said justices at their said session shall and may, upon due proof of such notice given as aforesaid, hear and determine every such appeal in a summary way, and shall award or order to the party in whose behalf such appeal shall be determined, such costs and charges, as they in their discretion shall think reasonable and just, to be paid by the party against whom such appeal shall be determined: and in case such costs and charges shall not be paid within the space of ten days next after the hearing and determining of such appeal, the same may be levied by distress and sale of the goods and chattels of the person ordered to pay the same, or his surety or sureties, in the same manner and by the same means as all distresses are ordered to be taken by virtue of this act.

§ 13. No action of law shall be brought or commenced against any person for any thing done or to be done in execution of this act, until one calendar month after notice thereof in writing shall have been given to the person against whom such action shall be intended to be brought, or left at his last or usual place of abode, setting forth the cause of such action, and containing the name and place of abode of the plaintiff or plaintiffs, and also of his or their attorney; and every such action shall be brought within three calendar months next after the cause of action shall arise, and shall be laid and sued in the county,

shire, division, city, or place where the fact shall have been committed; and the defendant therein may plead the general issue, and give this act and the special matter in evidence at any trial, and that the same was done by virtue thereof; and also it shall be lawful for such person, at any time before action brought, to tender amends to the party complaining, or his attorney, and in case the same is not accepted, to plead such tender in bar to the action, together with the plea of not guilty, and any other plea, with the leave of the court; and if, on the trial of such action, it shall appear that the same was brought before the expiration of one calendar month next after such notice, or after the end of three months next after the cause thereof shall have arisen, or if such action shall have been brought or laid in any other county or place than as aforesaid, or after sufficient tender of amends shall have been made to the party aggrieved, then and in any of such cases, the jury shall find a verdict for and acquit the defendant; or if the plaintiff discontinue the same after the defendant shall have appeared, or shall be nonsuited, and if, upon demurrer, judgment shall be given against the plaintiff, the defendant in such action shall have double costs, and have the like remedies for recovering the same as defendants have for recovering their costs in other cases at law; and no action, suit, information, or other proceeding whatsoever shall be brought or commenced against any person for any offence against this act, unless the same shall be commenced within six calendar months next after any such offence shall have been committed.

RESTRICTING FISH AND FISHING

shire, division, city, or place where the fact shall have been committed; and the defendant therein may plead the general issue, and give this and any other matter in evidence at any trial, and that the court shall be lawful to order any time before action brought, to order answers to the party claiming, or his attorney, and in case the same is not accepted, to send each party in due to the action, together with the plea of not guilty, and any other plea, with the leave of the court.

TERMS USED BY ANGLERS EXPLAINED.

Bawk, a knot in a hair or link.

Bed, hairs bed well when they twist kindly.

Bedding, the body of an artificial fly.

Break, a knot in the joint of a rod.

Chine a Salmon, cut him up.

Cock, a float cocks when it swims perpendicular in the water.

Drag, an instrument to disentangle the line.

Fin a Chub, cut him up.

Frush a Chub, dress him.

Gildard, the link of a line.

Gobbet a Trout, cut him up.

Grabble, fishing on the grabble is, when the line is sunk with the running plummet fast to the bottom, so that the hook-link plays in the water.

Hang a Fish, hook him.

Kink, a line kinks in trolling, when it is twisted between the top of the rod and the ring.

Leash of Fish, three.

Pouch, a pike pouches when he swallows the bait.

Prime, fishes are said to prime when they leap out of the water.

TERMS USED BY ANGLERS EXPLAINED.

Shoal, any great number of fish together.

Solay a Bream, cut him up.

Splate a Pike, cut him up.

Trash, any thing which swims down the water.

Truncheon an eel, cut him up.

Tusk a Barbel, cut him up.

Veer a line, let it off the reel after striking.



I N D E X.

ANGLER, materials &c. with which he should be provided, 17.

Angling, rules and hints to be observed in, 35.

Baits, general description of, 18, 85 ; various other, 26.

Barbel, description of, and how to angle for, 66.

——, the best places to find, 68.

Barkworm, or ash-grub, for bait, 34.

Barometer, rules for judging by the, 189.

Black-bee, or humble-bee, for bait, 34.

Black-beetle, for bait, 35.

Bleak, or bley, directions for taking, 77.

Bobs, where found, 22.

Balker's (Mr.) curious account of the May-fly, 30.

Bream, how to catch, 52.

Bull-head, or miller's-thumb, description and haunts, 79.

Cad's-fly, described, 137.

Carp, general description of, and how to take, 49.

Charr, (Red) description and haunts, 80.

——, (Gilt) description and haunts, 82.

Chub, where to angle for, 38, 64.

Cock-chafer, for bait, 35.

Cod-bait, cad-bait, or cadis-bait, 23.

Cowdung-bob, or clap-bait, where found, 22

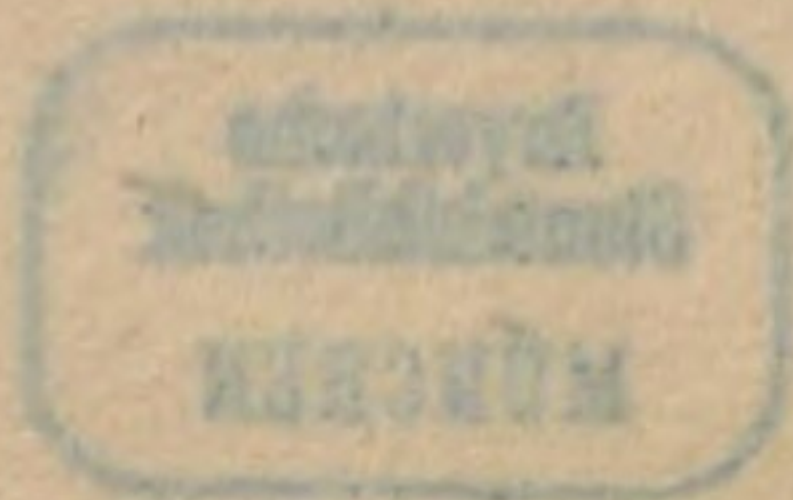
Dace, or dare, how to angle for, 73.

Drugs, for taking fish, 91.

Eels, where to angle for, 38, 70 ; general description of, 68.

——, places famous for, 71.

Enemies of fish, poetical description of, 8.



I N D E X.

- Fishes, general history of, 1.**
 ———, names of English, 3.
 ———, method of breeding, 4.
 ——— feeding, 5.
 ———, drugs &c. for taking, 91.
Fish-ponds, stews, &c. best modes of making, 88.
Flag-worms, or duck-worms, for bait, 23.
Flies, natural, how found, 29.
 ———, the prevailing times for each sort, 117.
 ———, artificial, materials for making, 103.
 ———, how to make, 108, to 147.
Flounders, how to fish for, 64.
Fly-fishing, natural, described, 28.
 ———, artificial, 98, 143.

Gentles, or maggots, to breed and preserve, 25.
Glue for rods, 95.
Gold and silver fishes, history of, 83.
Grayling, or gragling, where found and how to take 49.
Great-moth, for bait, where found, 34.
Green-drake, natural, 30.
 ———, artificial, 103.
Grey-drake, natural, 30.
 ———, artificial, 122.
Gudgeon, how to take, 76.
Guinnia, where found, 80.
Guilt, (see Charr, gilt),

Hawthorn-fly, where found, 34.
Hooks, how to make, 15, 94.

Laws respecting fish and fisheries, summary of the, 239.
Lines, for angling, how to make, 12.
 ———, fly-fishing, 99.
Loche, or loach, where found, &c., 78.

Materials for artificial flies, 103.
Minnows, description, baits for, &c., 78.

Oak-fly, ask-fly, or woodcock-fly, how found, 29.
Ointments for taking fish, 92.

Palmer-fly, palmer-worm, how found, 22.
 ———, artificial, how to make, 108.

I N D E X.

- Pastes, for bait, 25.
 Perch, where to angle for, 38, 61.
 ———, description of, 60.
 ———, how to angle for, 62.
 Pike, general description of, and how to take, 53.
 ———, (see also the art of Trolling), 197.
 Ponds, (see Fish-ponds)
 Pope, or ruff, its description and haunts, 76.
 Rivers, list of the principal, in England, 147, 154.
 ———— Wales, 153.
 Roach, where to angle for and how, 38, 71.
 Rods, how to make, 9.
 ———, different sorts described, 11, 12.
 ———, a glue for, 95.
 ———, for fly-fishing, 99.
 Rud, where found, 73.
 Ruff, (see Pope)
 Salmon, general description of, 41.
 ———, in what rivers found, 43.
 ———, how to angle for, 43.
 Stews, (see Fish-ponds.)
 Stickle-back, description of, 79.
 Sun, table of rising and setting throughout the year, 188.
 Tench, description of, 62; how to take, 63.
 Thames, particular account of the fishing in, 155.
 ———, rivers which flow into the, account of the
 fishing in, 158.
 Trolling, Mr. Nobbs's art of, 198.
 Trout, where to angle for, 38.
 ———, general description of, and rules for angling
 for, 44.
 Weather, prognostics respecting the, 161.
 Worms for bait, general account of, 18.
 ———, how to scour and preserve, 19.
 ———, Gay's poetical description of, 21.
 ———, directions for baiting with, 37.

T. C. HANSARD, PRINTER,
 Peterborough-court, Fleet-street, London.



BEST'S
ART OF ANGLING,
WITH
NOBBS'S COMPLETE TROLLER.

Best, Thomas

The Art of Angling confirmed by actual experience, with several recent discoveries; to which is added Nobb'es complete Trobler; also Prognostics of the weather, with ad without the Barometer

London 1822

Oecon. 256 m

urn:nbn:de:bvb:12-bsb10294118-5